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NINTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH,

OF THE

STATE OF RHODE ISLAND,

FOR THE YEAR ENDING DECEMBER 31, 1886,

AND INCLUDING THE REPORT UPON

BIRTHS, MARRIAGES AND DEATHS IN 1885.

PROVIDENCE:
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1887.

MEMBERS OF THE RHODE ISLAND STATE BOARD OF HEALTH.

December 31, 1886.

	P. O. Address.
HENRY E. TURNER, M. D., *Chairman*	Newport.
HENRY W. ROSE, M. D	Westerly.
ALBERT G. SPRAGUE, M. D	River Point.
GEORGE W. JENCKES, M. D	Woonsocket.
THOMAS H. SHIPMAN, M. D	Bristol.
SAMUEL M. GRAY, C. E	Providence.
CHARLES H. FISHER, M. D., *ex-officio, Secretary*	Providence.

GENERAL CONTENTS.

- Report of the Secretary.
  - Health of the State. 1886.
  - Reports of Medical Correspondents—Prevalence of Acute Diseases in the Towns.
  - Reports of Town Clerks in Relation to Sanitary Improvements in the Towns.
  - Meteorology.
  - Cattle Commission.
  - Pleuro-Pneumonia, Swine Plague, Tuberculosis, Glanders, Veterinarians.
  - Water Supply.
  - Travels of Intermittent Fever in Rhode Island.
  - Anticipatory Treatment of Local Epidemics.
  - National Conference of State Boards of Health.
- Index.

260606

To the Honorable the General Assembly of the State of Rhode Island:

Herewith is respectfully presented the Ninth Annual Report of the State Board of Health, in compliance with Sec. 9, Chapter 83, of the Public Statutes.

The Report is for the year ending December 31st, 1886, and presents in part the general proceedings of the Board and the work performed under its supervision; and is wholly included in the report of the Secretary, which will be found in the following pages, and is respectfully submitted.

Dr. T. H. Shipman was re-appointed to membership during the year, by which the personnel of the Board remains unchanged.

As usual, the Report of the Secretary upon the births, marriages and deaths in the State during the previous year will be found included.

H. E. Turner, *President.*

C. H. Fisher, *Secretary.*

April 2, 1887.

REPORT OF THE SECRETARY.

Gentlemen of the Board:

With the details of the proceedings of the Board during 1886 you are already familiar; and it has not seemed advisable to add to the pages of the Annual Report by repeating what has been made public by the newspaper press of the transactions at the different meetings of the Board during the year.

In relation to the work of the Secretary not specially reported, but of which the Board had cognizance, it may be suggested that the summaries of the returns from the towns in regard to sickness and sanitary improvements, and the papers following will give a general account.

REPORTS OF SICKNESS.

Reports from medical correspondents in the several towns of the presence of the different forms of disease, with the extent of prevalence as to the localities, area of territory, season of the year and proportion of the population affected, afford, as will be admitted, better criteria of the general health of the State during any year than the returns of death. In furtherance of the purpose of making a record from year to year of the statistics of sickness, the Secretary forwarded to practicing physicians in every part of the State, as in previous years, a circular of inquiry in regard to the amount and kinds of sickness, degree of severity, whether of epidemic or endemic origin, if either, or whatever the cause, if known or suspected, with such comments and conclusions in the reports thereon, as seemed just and proper on the part of each correspondent. The reports will be found in pages following under the heading of "Reports from Medical Correspondents," and will show the status of the public health during 1886.

REPORTS OF SANITARY IMPROVEMENTS.

It has been the design of the Secretary to ascertain from year to year, as the Board has been aware heretofore, what improvements have been made or measures taken in the different towns, and under municipal authority more particularly, in relation to works that are intended to preserve or promote the public health, or that ultimately may result in such preservation and promotion, while more immediately subservient to public comfort, convenience and utility. Such, for instance, as the abatement of nuisances; the introduction of water for general household use; the disposal of public and private wastes; house refuse and drainage; the reclaiming of water-soaked lands for economical purposes by under-draining, *et al.* A circular has been sent at the close of each year to the town and city clerks of the several municipalities of the State, making inquiry as to what may have been done in each town and city respectively in the direction indicated.

By such means a continuous and permanent record is kept, of all the improvements favorably affecting public sanitation that may be made in the different towns and cities from year to year, for any desired period of time. Each Annual Report will present the result of each year's work in the different towns, and a set of Annual Reports will give a continuous history of public sanitation in the State.

CATTLE COMMISSION.

The transference of contagious pleuro-pneumonia from the States bordering on, or in the near vicinity of the Atlantic Ocean to Illinois and other Western States, where it has appeared in so many localities and in such large numbers, has aroused public attention to the dangers menacing our own cattle interests by the probable introduction, sooner or later, of that disease into the State; and with the increased number of suspected cases of tuberculosis in milch cows, and the suspected sale of milk from the same, have occasioned an increased number of notices, conferences and visits of inquiry at the office of the Board and an increased number of requests for investigation of suspected cases. Remarks at considerable length in relation to contagious pleuro-pneumonia and tuberculosis will be made under the heading "Cattle Commission" in the body of the Report.

CATTLE LEGISLATION.

The Secretary has framed and caused to be introduced in the General Assembly, at different sessions of the same during several years, acts for the better security of the cattle interests of the State, by a clearer definition of the powers and duties of the Board in the department of the Cattle Commission, but so far without success. While no person has yet appealed to the courts for redress for alleged exercise of arbitrary authority, or trespass on forbidden premises, the phraseology of the present statutes is such as to leave the Board in some doubt as to the extent of the authority which the statutes permit in the entering of premises and the search for animals suspected of having contagious or infectious diseases, and which have been designedly concealed. It is hoped, for the best interests of the owners of cattle and horses, that all ambiguity in the structure of the cattle laws may be removed during the forthcoming session of the General Assembly.

NATIONAL CONFERENCE OF STATE BOARDS OF HEALTH.

The report made to the Board at the quarterly meeting held October, 1886, of the proceedings of the National Conference of State and Provincial Boards of Health, held at Toronto, Canada, October 4–8, 1886, seemed to be of sufficient importance (as giving, in some measure, an idea of the spirit and quality of such gatherings) to be made a part of the Report of the Board. The report then made, and so stated at the time, it will be remembered, was only an outline of the proceedings, with brief extracts only of the papers read and remarks made. The whole proceedings, though of great interest *in toto*, were far too voluminous for entire reproduction in this connection.

WATER SUPPLY.

The importance of a knowledge of what constitutes healthful water for drinking purposes, or rather, conversely, what renders water, otherwise good, unfit for drinking purposes, is fast acquiring public appreciation. The fact that compact communities in existence for any lengthened period of time, dependent on surface wells for water for domestic use will, sooner or later, find their water contaminated to an extent dangerous to health as it is taken from the well; and the fact that the attention of such communities will be, from time to time, throughout the State, directed to the obtainment of pure or safe water from some proper source, by which the whole population may be supplied, makes the presentation of instructive papers upon the quality and methods of water supply, always appropriate. The paper of J. P. Cotton, C. E., will be found replete with instructive facts and valuable suggestions.

INTERMITTENT FEVER.

Dr. Clark has, unquestionably, given more attention to the study of the invasion and progress of intermittent fever in Rhode Island than any other person. The last visitation of this State by that erratic disease has caused the writing of a considerable number of papers, which have presented the subject in various relations and aspects. Some of them have formed a part of the Annual Reports of the Board. None have been so complete as the account given in the paper, "Travels of Intermittent Fever in Rhode Island," which will be found of great interest to all readers, and will become the standard of reference in future years.

THE ANTICIPATORY TREATMENT OF LOCAL EPIDEMICS.

No methods are so efficient in the restriction of epidemics of contagious and infectious diseases, so positively preservative of human life and saving of pecuniary expenditure, as the prompt and absolute isolation of the first cases of such diseases, the complete disinfection of all the excretions of the sick, and the equally prompt ascertainment and removal, if possible, of the causes of such diseases.

Such, evidently, were the convictions of Dr. Storer when he was moved to write the forceful article with the title above-named, to be presented to the Rhode Island Medical Society for consideration, preceding a motion to inaugurate a movement by which the "desideratum devoutly to be wished," the anticipatory treatment of probable or possible epidemics, might be accomplished. It is creditable to the Medical Society that it so promptly approved the measure proposed. It is creditable to Dr. Storer that he initiated a procedure looking toward so desirable a purpose.

The three papers alluded to above have been written by gentlemen of large culture, with the aim of presenting facts; are correct in statement, vigorous in language, and will be read with much satisfaction by persons interested in sanitary progress.

Respectfully submitted,

C. H. Fisher, *Secretary.*

HEALTH OF THE STATE, 1886.

It is with great satisfaction that the Secretary can report the continued average good health of nearly all parts of the State, during 1886. Since the largely fatal epidemic of scarlatina in Westerly, during the winter of 1884–85, and the following spring, no epidemic attended with a large death rate has occurred in the State. Several forms of disease, classed as miasmatic were quite largely prevalent in a few towns, during 1886, and in a still fewer number of towns had epidemic prevalence, but unattended with large fatality.

In the last previous Report it was remarked that, "For two years the State has been unusually exempt from the epidemic prevalence of those contagious diseases that are largely fatal in their usual forms," and now as stated above another year of general exemption is added.

To what extent the general exemption from the epidemic prevalence of the severer forms of contagious diseases, is due to increased attention paid to sanitary surroundings, and to the observance of the rules and regulations relating to contagious diseases, circulated by the health authorities of a considerable proportion of the towns in the State, it is not possible to correctly estimate.

Of the zymotic diseases which prevail to a greater or less extent during every year in some section of the State, and which are important because of their occasional epidemic occurrence and large fatality, the following prevailed during 1886, to the extent stated, according to the reports of the correspondents of the Board.

CHOLERA INFANTUM.

Cholera infantum had very large prevalence only in Pawtucket and Woonsocket. In Woonsocket it had a large mortality. In fifteen towns it had an average or moderate prevalence; otherwise in the rest of the State, it had no occurrence or only in rare instances.

CROUP.

Without exception, no town in the State had a large prevalence of croup, during 1886. In one-fifth of the towns only had it an average or moderate prevalence, in about one-half of the towns it had small prevalence, and in one-seventh of the towns no cases occurred unless they were of the spasmodic type and required no professional attention.

DIARRHŒA AND DYSENTERY.

In no part of the State, except in Washington county, and in the towns of Cranston and Johnston, had diarrhœa or dysentery any large prevalence. With two exceptions, every town in Washington county reported a large prevalence, and in the two exceptions diarrhœal disease in one form or the other had more than average prevalence. In 1885 all the towns in the southern part of the State were rather unusually exempt from diarrhœal diseases of all kinds, while in the central part, the same diseases prevailed to an unusual extent. In 1886 the same central towns had hardly a moderate prevalence.

DIPHTHERIA.

There were cases of diphtheria reported from every town in the State, during 1886, with the exception of New Shoreham. In Bristol, Lincoln and Providence city, the prevalence was larger than ordinary. In Providence city the increase was not less than one hundred per cent. over the number of cases in 1885, and was considerably larger than in any year, since 1881. In all the other towns in the State, reports showed only a moderate or quite small prevalence.

MALARIAL DISEASES.

From Cumberland and East Providence the prevalence of malarial diseases was reported as of full epidemic proportions. From other towns bordering on the Blackstone river there was reported a prevalence approximating an epidemic, and Cranston, Johnston, Scituate, Coventry and Warwick, reported a quite large prevalence. The towns in which the malarial disease made its first appearance in the State in the form of intermittent fever, in 1880, reported only a moderate or very small prevalence.

The whole of Newport county is and has been entirely exempt from indigenous malaria.

MEASLES.

Measles during some part of the year were epidemic in Scituate and Exeter, generally of mild type. The disease had large prevalence in Providence city with rather more than average severity, and it also had frequent occurrence in some of the villages in Warwick and Hopkinton. From nearly half of the towns, reports gave no known occurrence during the year.

SCARLATINA.

No epidemic of scarlet fever occurred in any part of the State during 1886. From East Greenwich, Warwick and Hopkinton, reports showed a rather large prevalence, but not of great severity. A moderate prevalence was reported from Warren, Pawtucket, Johnston and Westerly, generally of mild type.

TYPHOID FEVER.

Typhoid fever was not epidemic in any part of the State during 1886. In only five towns, was there even a moderate prevalence, viz. Providence city, Cranston, Johnston, Pawtucket and Scituate. In other towns there were only occasional cases occurring sporadically.

WHOOPING COUGH.

There was an epidemic prevalence of whooping cough in parts of Burrillville and Glocester, a considerably large prevalence in Warwick through the summer and fall, amounting to almost an epidemic in Natick. It prevailed quite largely during the summer and fall in Providence city, and the adjoining section of Johnston, and during the spring and summer in Westerly.

In other towns it was entirely absent or had only small prevalence.

The following tables will show the comparative prevalence of several of the most important acute diseases, as they occurred in the different towns in Rhode Island during the years 1884, 1885 and 1886.

Comparative prevalence of twelve important acute diseases during 1884.

TOWNS.	Bronchitis.	Cholera Infantum.	Croup.	Diphtheria.	Diarrhea and Dysentery.	Fever, Typhoid.	Fever, Malarial.	Measles.	Pneumonia.	Rheumatism.	Scarlatina.	Whooping Cough.
Barrington	=	=	=	0	=	—	+	—	+	=	0	—
Bristol	=	—	—	0	—	+	—	0	-	—	—	—
Warren	=	=	—	0	=	=	=	+	+	+	0	+
Coventry	=	=	—	=	+	—	..	—	+	+	—	.
East Greenwich	=	=	—	—	=	=	—	0	=	=	=	=
West Greenwich	=	—	=	..	—	—	0	0	=	+	=	—
Warwick	+	=	+	—	—	—	=	*	=	=	..	—
Jamestown	=	—	0	0	—	—	0	0	—	—	0	—
Little Compton	—	—	0	..	—	=	0	*	—	—	0	=
Middletown	=	—	0	..	—	=	0	—	=	0	=	—
New Shoreham	—	—	0	—	—	+	0	*	—	—	0	0
Portsmouth	=	—	0	0	—	—	0	0	—	—	—	..
Tiverton	=	—	0	..	—	—	0	—	=	=	—	..
Newport City	=	—	..	..	—	=	..	—	=	=	+	+
Burrillville	—	—	—	=	=	*	0	0	+	=	+	0
Cranston	=	=	—	—	—	=	+	—	=	+	=	—

Cumberland	+	—	+	+	—	—	*	..	—	=	=	*
East Providence	=	=	—	=	—	+	=	—	+	+	=	—
Foster	—	—	..	..	—	—	..	+	=	=	0	..
Glocester	—	—	..	=	=	=	0	0	+	=	=	0
Johnston	=	+	—	—	—	=	+	—	=	=	+	—
Lincoln	=	=	—	=	=	—	+	..	—	—	=	=
North Providence	=	—	..	=	—	=	+	—	+	+	—	0
North Smithfield	=	=	—	..	=	=	—	0	=	+	—	0
Pawtucket	=	—	+	+	=	=	+	+	—	—	+	=
Scituate	=	=	—	—	—	=	+	—	+	+	+	0
Smithfield	=	=	—	—	=	=	+	0	=	+	=	..
Woonsocket	=	=	—	..	=	+	+	0	=	+	+	0
Providence City	=	+	=	=	—	—	=	=	+	+	+	=
Charlestown	=	—	..	—	+	—	—	0	—	—	..	+
Exeter	=	—	—	..	—	—	0	0	—	+	—	0
Hopkinton	=	—	..	—	=	=	—	0	—	=	—	+
North Kingstown	=	=	—	—	=	=	—	0	—	=	=	—
South Kingstown	=	=	—	..	=	=	..	0	+	+	—	0
Richmond	=	—	..	—	+	=	—	0	—	=	..	*
Westerly	=	..	—	..	=	—	=	0	+	=	*	+

☞ The signs or characters used in the above Table, indicate the degrees of prevalence of the diseases named, as follows: The * indicates an epidemic prevalence; the sign + a large prevalence; the sign = a moderate prevalence; the sign — a small prevalence; the dots a *very* small prevalence, and the 0 no prevalence according to the returns.

Comparative prevalence of twelve important acute diseases during 1885.

TOWNS.	Bronchitis.	Cholera Infantum.	Croup.	Diphtheria.	Diarrhea and Dysentery.	Fever, Typhoid.	Fever, Malarial.	Measles.	Pneumonia.	Rheumatism.	Scarlatina.	Whooping Cough.
Barrington	=	—	—	..	—	=	+	0	=	=	..	—
Bristol	+	—	—	+	+	=	0	—	—	=	—	=
Warren	=	—	..	—	=	=	=	0	+	=	—	—
Coventry	—	..	=	+	+	..	—	*	..	+	—	+
East Greenwich	=	+	—	—	+	—	—	0	=	=	..	..
West Greenwich	—	—	—	=	+	—	..	—	..	=	..	—
Warwick	=	—	=	=	=	=	=	=	=	+	..	=
Jamestown	=	..	..	..	=	—	0	0	=	=	..	0
Little Compton	+	+	—	0	=	=	—	+	+	=	0	+
Middletown	+	—	—	=	=	—	..	0	=	=	0	0
New Shoreham	=	..	0	—	=	=	0	0	0	=	..	..
Portsmouth	=	..	—	=	=	—	..	..	=	=	..	0
Tiverton	+	=	—	..	=	=	0	+	=	—	0	=
Newport City	+	—	—	=	=	—	..	0	+	=	—	0
Burrillville	=	—	0	—	—	—	..	*	=	—	0	*
Cranston	=	—	=	=	=	=	+	—	+	=	—	..

Cumberland	=	=	=	..	—	=	+	0	—	=	..	..
East Providence	=	=	+	+	—	=	—	—	0	—	—	+
Foster	=	..	..	—	=	..	0	—	=	=	0	=
Glocester	+	0	0	0	—	=	0	—	+	=	0	*
Johnston	=	—	+	+	=	=	+	—	+	=	—	..
Lincoln	=	=	=	..	=	=	+	0	—	=	..	—
North Providence	=	—	—	=	=	=	=	—	+	+	—	..
North Smithfield	=	—	—	—	=	=	—	=	=	—	..	+
Pawtucket	+	=	—	=	—	—	+	+	=	=	+	..
Scituate	—	=	0	+	=	=	—	0	=	=	0	0
Smithfield	+	—	..	=	—	—	—	0	—	=	..	..
Woonsocket	=	=	=	=	=	=	+	—	=	—	—	*
Providence City	+	=	=	=	=	—	=	=	+	=	=	+
Charlestown	+	0	..	—	—	—	=	=	=	=	=	—
Exeter	=	—	..	..	—	—	0	0	=	—	..	..
Hopkinton	=	—	—	—	=	—	—	0	=	—	..	..
North Kingstown	=	=	—	=	=	—	—	..	—	—	..	0
South Kingstown	=	=	—	—	=	—	..	0	=	—	—	..
Richmond	=	—	—	—	=	—	—	0	=	=	..	..
Westerly	=	—	..	..	=	=	=	..	=	=	*	..

☞ The signs or characters used in the above Table, indicate the degrees of prevalence of the diseases named, as follows: The * indicates an epidemic prevalence; the sign + a large prevalence; the sign = a moderate prevalence; the sign — a small prevalence; the dots a *very* small prevalence; and the 0 no prevalence, according to the returns.

Comparative prevalence of twelve important acute diseases during 1886.

TOWNS.	Bronchitis.	Cholera Infantum.	Croup.	Diphtheria.	Diarrhea and Dysentery.	Fever, Typhoid.	Fever, Malarial.	Measles.	Pneumonia.	Rheumatism.	Scarlatina.	Whooping Cough.
Barrington	+	—	—	—	—	—	=	—	=	=	..	—
Bristol	=	=	—	+	=	—	—	0	—	+	0	—
Warren	=	—	—	=	=	—	=	—	+	=	=	—
Coventry	+	—	=	=	=	—	+	..	=	+	—	=
East Greenwich	=	—	—	—	=	—	—	0	=	=	+	=
West Greenwich	=	—	=	—	=	..	..	—	—	+	..	=
Warwick	=	=	=	=	=	—	+	+	—	=	+	+
Jamestown	=	—	—	—	=	—	0	..	—	=	0	0
Little Compton	—	—	..	..	—	..	0	0	=	=	0	0
Middletown	=	=	—	—	—	—	0	..	—	—	0	0
New Shoreham	—	—	0	0	—	0	0	0	..	..	0	0
Portsmouth	—	—	0	—	—	—	0	0	=	=	0	0
Tiverton	..	=	0	—	..	0	0	..	=	=	0	0
Newport City	—	=	—	—	=	—	0	..	—	=	..	—
Burrillville	=	—	—	—	=	—	..	0	=	=	0	*
Cranston	+	=	—	—	+	=	+	—	+	=	—	=

Cumberland	=	—	0	—	—	..	*	0	—	=	—	—
East Providence	+	=	—	=	..	—	*	..	=	=	—	—
Foster	=	—	—	—	=	—	..	0	=	=	0	
Glocester	=	0	0	—	=	0	..	0	=	—	0	*
Johnston	+	=	=	=	+	=	+	=	+	=	=	+
Lincoln	=	=	..	+	—	..	+	0	—	=	—	—
North Providence	=	=	—	=	—	—	—	..	—	=	—	—
North Smithfield	=	=	=	=	=	—	=	..	=	=	..	..
Pawtucket	=	+	—	=	=	=	+	..	=	=	=	—
Scituate	=	=	—	..	=	=	+	*	+	=	0	*
Smithfield	=	=	—	=	—	—	—	—	=	=	0	..
Woonsocket	+	+	=	=	=	—	+	—	=	=	—	..
Providence City	+	=	=	+	=	=	=	+	+	—	—	+
Charlestown	=	..	—	—	+	..	..	0	=	+	..	—
Exeter	+	..	..	..	=	—	0	*	—	+	0	..
Hopkinton	+	—	..	..	+	—	—	+	+	+	0	..
North Kingstown	=	—	—	—	=	—	..	0	=	=	—	..
South Kingstown	=	=	..	..	+	..	..	0	=	=	+	*
Richmond	+	..	—	—	+	—	..	—	=	+	..	—
Westerly	=	—	—	..	+	—	=	0	=	+	=	+

☞ The signs or characters used in the above Table, indicate the degrees of prevalence of the diseases named, as follows: The * indicates an epidemic prevalence; the sign + a large prevalence; the sign = a moderate prevalence; the sign — a small prevalence; the dots a *very* small prevalence; and the 0 no prevalence, according to the returns.

ANNUAL REPORTS OF MEDICAL CORRESPONDENTS.

The plan of obtaining from the regular medical correspondents of the Board, and other physicians, as in previous years, of a report at the commencement of each year, covering, in a general way, the whole of the preceding year, in relation to the amount of sickness of all kinds, the prevalence of particular diseases, and sanitary conditions and movements in their respective localities, has been continued and the following circular sent therefor as usual.

CIRCULAR NO. 49.

OFFICE OF SECRETARY OF THE STATE BOARD OF HEALTH.

PROVIDENCE, Jan. 1, 1887.

The Secretary of the State Board of Health desires to obtain from all respectable physicians in every section of the State an Annual Report covering the whole twelve months preceding the above date.

The following questions will indicate the information sought, and the general plan of such report; but correspondents need not be confined to precise replies to the questions presented, all the freedom being allowable of such modifications and additions as the circumstances or peculiarities of each locality may seem to warrant.

These annual reports are desired for the purpose of presenting the status of the public health and the sanitary conditions and sentiment existing in the different sections of the State, during the year 1886, in the Ninth Annual Report of the State Board of Health.

They should be returned to the Secretary of the Board by the second week in February.

Any additional postage stamps needed to cover postage on more extended consideration of the topics suggested, or any other topic having relation to the public health, will be immediately refunded on the receipt of papers.

QUESTIONS.

1. Name of Physician. M. D.

2. Name of town and circuit.

3. Taking sickness of all kinds, has there been more or less than usual in your circuit the past year? How much?

4. Which of the following zymotic diseases have prevailed in your circuit during the past year? Please state when sporadic and when epidemic, whether mild, average or severe, and in what months they occurred, and in what localities?

a. Cholera Infantum.

b. Croup.

c. Diarrhea and Dysentery.

d. Diphtheria.

e. Fever, Malarial.

f. Fever, Typhoid.

g. Measles.

h. Scarlatina.

i. Small Pox.

j. Whooping Cough.

5. Any other zymotic disease becoming epidemic.

Also, please state what degree of prevalence, whether large, average or small, and if above average, in what months was the large occurrence, of the following named diseases. State degree of prevalence and time of occurrence under the headings following:

	Degree of PREVALENCE.	MONTHS.
k. Brain, Inflammation and Congestion of		
l. Bronchitis, Acute		
m. Meningitis, Cerebro Spinal		
n. Pneumonia.		
o. Rheumatism.		
p. Stomach, Acute Diseases of		

6. What diseases, not classed as zymotics, have had unusually large prevalence during the past year?

7. What diseases have been attended with unusual fatality?

8. Have any circumstances occurred within your observation or knowledge that seemed to indicate that Scarlet Fever, Diphtheria or Typhoid Fever had been taken or communicated from one person to another? A full history of known facts in detail should be given. Such history need not be confined to any particular year. State on separate sheet.

8. Has there been, in your opinion, any advance in public sentiment or views of individuals, in your circuit, in regard to the importance of sanitary surroundings; or any increased interest in means of preventing diseases? State what reasons for belief.

Very respectfully,

CHAS. H. FISHER,

Sec. of State Board of Health.

The following extract from the Public Statutes in relation to the duties of town and local boards of health and practicing physicians, was also appended:

Public Statutes, Chapter 83.

Sec. 6. The secretary of the said board shall make inquiry from time to time, of the clerks of town and local boards of health and PRACTICING PHYSICIANS, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health, in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals in their several towns and localities respectively, and the said clerks of town and local boards of health, and the said PRACTICING PHYSICIANS shall give such information, in reply to said inquiries, of such facts and circumstances as shall have come to their knowledge.

IN REPLY TO THE FOREGOING CIRCULAR.

The following reports, received from local correspondents of the medical profession in the several cities, towns and villages of the State, will give a good representation of the general status of the public health during the year 1886, as to the presence or absence of epidemics or endemics or large prevalence of important or unusual diseases in the several locations, the sanitary conditions and improvements, if any, in their several circuits, and other suggestions in response to the preceding circular:

BRISTOL COUNTY.

2. Bristol.

3. The proportionate amount of sickness of all kinds during the year 1886, compared with previous year, has been about on average, but below rather than above.

The following zymotic diseases have prevailed:

Cholera Infantum. Some fifteen or twenty cases during July and August, sporadic and of average type.

Croup. But little croup, and mostly spasmodic.

Diarrhea and Dysentery. The usual number during the summer months, generally mild.

Diphtheria. Sporadic cases of severe type during January, February and March.

Fever, Malarial. Very little. Less than previous year.

Fever, Typhoid. Less than previous year. There were some twenty cases in all, some of severe type, but sporadic.

Measles. No cases to my knowledge.

Whooping Cough. Small number. Average type.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. A very few cases during December.

Bronchitis, Acute. Average from January 1st to May 1st, and from October 1st to January.

Pneumonia. Not more than five or six cases during the winter, and mild.

Rheumatism. Several cases of marked inflammatory rheumatism, severe during the months of November and December.

6. No diseases had unusually large prevalence.

7. None attended with unusual fatality.

8. Nothing new.

9. Some slight progress in the line of sanitary improvements.

T. H. Shipman, M. D.

2. Bristol.

3. Taking sickness of all kinds, there has been about the same as usual during the past year.

The following zymotic diseases have prevailed during the year:

Diarrhea and Dysentery. Average prevalence, mild.

Diphtheria. Quite prevalent. Severe, January, February, March, April, May, November, December. Scattered throughout the thickly settled part of the town.

Fever, Malarial. Very little.

Fever, Typhoid. A few cases, mild.

Bronchitis, Acute. Average prevalence. Cold months.

Pneumonia. Average prevalence. Winter.

Rheumatism. Average prevalence through the year.

8. Nothing unusual in regard to the communication of diseases from one to another.

9. The town council has been asked to pass an ordinance requiring physicians to report every case of measles, scarlet fever, small pox, diphtheria, typhus fevers and typhoid fever to the town clerk.

H. S. Swan, M. D.

2. Warren, Barrington.

3. Taking sickness of all kinds, perhaps a slight increase during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. Not so largely as in past years.

Croup. Not so largely as in past years.

Diarrhea and Dysentery. About the same number of cases as usual.

Diphtheria. In the latter part of the year 1886, there has been an increase in number of cases of diphtheria, especially in the lower lands about Warren.

Fever, Malarial. About as last year.

Fever, Typhoid. Less than usual.

Measles. A few cases are reported.

Scarlatina. Quite a number of cases of a mild character in the present winter months. No deaths yet.

Whooping Cough. Early in the year a few cases. Mild.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Only exceptional cases.

Bronchitis, Acute. Average. Winter and fall months.

Pneumonia. Quite prevalent. Above average January, February, November and December.

Rheumatism. Average through the year.

Stomach, Acute diseases of. Average, summer months.

6. No diseases, not classed as zymotics, had unusually large prevalence.

7. No unusual fatality.

G. L. CHURCH, M. D.

KENT COUNTY.

2. COVENTRY, ANTHONY and surrounding villages.

3. About an average amount of sickness of all kinds during the year.

The following zymotic diseases have prevailed.

Cholera Infantum. Small number.

Croup. Average number of cases, cold months.

Diarrhea and Dysentery. Considerable of each, but not enough to pronounce either epidemic.

Diphtheria. Average amount, mostly of a mild type, with a few severe cases.

Fever, Malarial. Have had more than an usual number of cases, occurred mostly in September and October. Not severe.

Fever, Typhoid. A few mild cases only.

Measles. None.

Scarlatina. A few cases during the summer months.

Whooping Cough. A few cases in the spring.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Small number, spring and fall.

Bronchitis, Acute. None.

Meningitis, Cerebro Spinal. One case in December, fatal.

Pneumonia. Average amount, winter and spring.

Rheumatism. Large number of cases all through the year, with a few of much severity.

Stomach, Acute diseases of. None.

6. No disease, not classed as zymotic, had unusually large prevalence during the past year, unless rheumatism be one.

7. The diseases attended with unusual fatality, were pneumonia and cerebro spinal meningitis, and inflammation of brain proper.

9. The only noticeable advance in public sentiment or views of individuals, in regard to the importance of sanitary surroundings, is, that the people *talk* about them, and that is all.

J. Winsor, M. D.

2. Coventry and portions of adjoining towns.

3. Taking sickness of all kinds, there has been more in the villages and less in rural districts, making more than the average taking the whole year.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. But very few cases and those mild, occurred during the summer months.

Croup. A few severe cases in early spring.

Diarrhea and Dysentery. About the average amount during summer and fall.

Diphtheria. More than *usual* and very *severe*, one case fatal.

Fever, Malarial. A few severe cases and one obstinate one.

Fever, Typhoid. No genuine typhoid, but fall fevers, typhoidal in character.

Measles. A few mild cases.

Scarlatina. Less than usual and in simpler form.

Whooping Cough. Numerous cases but unusually mild, occurred in summer.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Average, winter months.

Bronchitis, Acute. More than usual, but rather mild, occurred in spring and fall months.

Meningitis, Cerebro Spinal. Sporadic average in winter months, one fatal.

Pneumonia Less than usual in number of cases, but a *very few severe cases.*

Rheumatism. More than the average, but generally mild.

Stomach, Acute diseases of. Average during July, August and September.

6. Catarrhal affections (if not a disease proper) have largely predominated the past year, especially from September to May 1885–86, and September to 1st January, 1887.

7. Diphtheria has been attended with unusual fatality.

8. There has been some improvement in the care of sink drains, cess pools and vaults in Washington, Anthony and Coventry centre.

F. B. Smith, M. D.

2. East Greenwich, Warwick and North Kingstown.

3. Taking sickness of all kinds, there has been about an average during the past year.

Zymotic diseases have prevailed as follows during the year.

Cholera Infantum. Less than usual.

Croup. Less than the average.

Diarrhea and Dysentery. About an average.

Diphtheria. Very little, or mild in form.

Fever, Malarial Some, but not much in this immediate neighborhood.

Fever, Typhoid. Less than the average.

Measles. None.

Scarlatina. Prevalent through summer and fall, and so far in winter, in mild form.

Whooping Cough. In spring and summer months.

5. No zymotic disease becoming especially epidemic.

Brain, Inflammation and Congestion of. Small prevalence.

Bronchitis, Acute. Average prevalence spring.

Meningitis, Cerebro Spinal. Small prevalence.

Pneumonia. Average winter and spring.

Rheumatism. Large prevalence winter, spring and fall.

Stomach, Acute diseases of. Nothing of especial notice.

6. Rheumatism had unusual large prevalence during the year.

7. No unusual fatality.

8. Nothing more than noted in former years.

9. Some slight advance in this direction.

J. H. ELDREDGE, M. D.

2. EAST GREENWICH and vicinity.

3. There has been about the usual amount of sickness.

The following zymotic diseases have prevailed during the past year.

Cholera Infantum. Small prevalence during summer with less than average severity.

Croup. Few sporadic cases; mild

Diarrhea and Dysentery. Average in number and severity.

Diphtheria. Few cases, mild.

Fever, Malarial. Few cases, mild, adjacent localities.

Fever, Typhoid. Few cases of average severity.

Measles. None.

Scarlatina. Prevailed during late summer and fall months; mild.

Small Pox. None.

Whooping Cough. Average severity, spring and summer.

5. No disease epidemic.

Brain, Inflammation and Congestion of. Average prevalence, summer months.

Bronchitis, Acute. Average prevalence, spring months.

Meningitis, Cerebro Spinal. Few cases. Severe.

Pneumonia. Average prevalence. Spring.

Rheumatism. Average prevalence.

Stomach, Acute diseases of. Less than average prevalence.

7. No diseases have been attended with unusual fatality.

8. Cases of communication of scarlet fever from one person to another have occurred.

9. No particular interest in respect to sanitation has been observable.

E. G. CARPENTER, M. D.

2. WARWICK, (RIVER POINT, PHENIX, &c.)

3. Taking sickness of all kinds, probably not more than usual during the past year.

Zymotic diseases have prevailed as follows during the year.

Cholera Infantum. Summer months, some, quite severe.

Croup. Less than the average. Scattered through the year.

Diarrhea and Dysentery. Average amount. Summer and fall.

Diphtheria. Considerable, severe, especially during the autumn.

Fever, Malarial. Large prevalence, but not more than the previous year.

Fever, Typhoid. Very few cases.

Measles. Quite prevalent during the spring.

Scarlatina. A few cases during spring and summer; mild.

Whooping Cough. Cases at Phenix and Lippitt during December.

5. No zymotic disease epidemic.

Bronchitis, Acute. Average prevalence, February, March and April.

Pneumonia. Not so prevalent as last year.

Rheumatism. Average through the year.

Stomach, Acute diseases of. Not frequent.

6. No diseases, not zymotics, had unusually large prevalence during the year.

7. Could hardly say any disease was *unusually* fatal

A. G. SPRAGUE, M. D.

2. WARWICK, PONTIAC and adjoining villages.

3. Taking sickness of all kinds, about the same amount as usual during the past year.

The following zymotic diseases have prevailed.

Cholera Infantum. Sporadic, July and August. Severe in Pontiac and Hill's Grove.

Croup. Sporadic. Mild in September, at Oak Lawn.

Diarrhea and Dysentery. Sporadic. Average. Pontiac and Natick during the early fall.

Diphtheria. Sporadic. Severe case in Pontiac.

Fever, Malarial. Epidemic if it may be so called, in Pontiac and at, and near pumping station Cranston, average severity.

Fever, Typhoid. Sporadic, during the months of September, October, November and December. In Apponaug and Pontiac severe.

Measles. Epidemic during December, in Old Warwick, severe. One case fatal.

Scarlatina. Epidemic in Hill's Grove; mild during months of September, October and November.

Whooping Cough. Epidemic in Natick; severe during July, August and September.

5. No other zymotic disease epidemic.

Brain, Inflammation and Congestion of. Large prevalence, October and November.

Bronchitis, Acute. Average prevalence, November and December.

Pneumonia. Average prevalence, November.

Rheumatism. Large prevalence, July, August, September, October, November and December.

Stomach, Acute diseases of. Average number, two cases in the months of October and November.

6. The diseases, not classed as zymotics, that had unusually large prevalence during the past year, were inflammation of the brain and rheumatism.

7. No diseases were attended with unusual fatality.

9. No perceptible advance in public sentiment or views of individuals, in regard to the importance of sanitary surroundings; or increased interest in means of preventing diseases.

D. O. KING, M. D.

2. WARWICK and vicinity.

3. Taking sickness of all kinds, there has been more than the usual amount.

The following zymotic diseases have prevailed in my circuit during the past year.

Cholera Infantum. A few cases during the summer months, generally quite mild.

Croup. Prevailed the year around. A few cases of membranous, severe.

Diarrhea and Dysentery. About the ordinary number of cases in this vicinity. Mostly in the warm months.

Diphtheria. Quite prevalent and severe, especially in the last four months of the year, 20 per cent. more than usual.

Fever, Malarial. Numerous cases the whole year, ten per cent. more than year before.

Fever, Typhoid. Fewer cases. None fatal.

Measles. Quite a number cases in the first part of the year, less than usual the rest of the year.

Scarlatina. Very few cases.

Whooping Cough. Usual prevalence throughout the year.

5. No epidemic.

Brain, Inflammation and Congestion of. Usual amount.

Bronchitis, Acute. Usual prevalence, spring and fall.

Meningitis, Cerebro Spinal. Usual number. Sporadic.

Pneumonia. Less than usual.

Rheumatism. Ordinary prevalence; mild.

Stomach, Acute diseases of. Average prevalence.

6. What diseases, not classed as zymotics, have had unusually large prevalence during the past year? None.

7. The principal disease attended with unusual fatality, was diphtheria, specially in Arctic centre, (Jericho), owing I think to many houses that have no cesspool. The filthy water, &c , being allowed to run and stand around the houses the whole year.

8. Diphtheria, scarlet fever and typhoid fever, to my observation and knowledge have been communicated from one person to another.

M. J. E. Legris, M. D.

NEWPORT COUNTY.

2. Newport, Middletown and Jamestown.

3. Taking sickness of all kinds, there has been rather less than usual during the past year.

The following zymotic diseases have prevailed during the year.

Cholera Infantum. Small number, usual season.

Croup. Not prevalent, occasional in cool months.

Diarrhea and Dysentery. Small prevalence, usual season.

Diphtheria. Occasional, different months.

Fever, Malarial. None.

Fever, Typhoid. Small prevalence, mostly fall months.

Measles. Very small number only.

Scarlatina. None.

Whooping Cough. Prevalent in December.

5. No zymotic disease epidemic.

Bronchitis, Acute. Small prevalence, winter and spring.

Pneumonia. Very few cases, cold season.

Rheumatism. Average prevalence, through the year.

Stomach, Acute diseases of. Very few, if any uncomplicated.

6. No diseases had unusually large prevalence.

7. None attended with unusual fatality.

8. Nothing unusual in regard to communication of diseases.

9. There is a gradual advance in public sentiment, in regard to the importance of sanitary surroundings.

H. E. TURNER, M. D.

2. NEW SHOREHAM.

3. Taking sickness of all kinds, there has been about the usual amount during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. Very few cases, mild, July and August.

Croup. None.

Diarrhea and Dysentery. Sporadic cases, very few, mild.

Diphtheria. None.

Fever, Malarial. None.

Fever, Typhoid. None.

Measles. None.

Scarlatina. None.

Whooping Cough. None.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. None.

Bronchitis, Acute. Very small number, spring.

Pneumonia. None.

Rheumatism Very small number, different months.

Stomach, Acute diseases of. None.

6. No unusually large prevalence of any disease during the year.

7. No unusual fatality.

9. Some increased interest in the sanitary conditions of dwelling houses.

C. H. HADLEY, M. D.

2. TIVERTON.

3. Taking sickness of all kinds, there has been about an average during the past year.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. Average number, mild. Month of July, between Tiverton and Fall River, Mass.

Croup. None.

Diarrhea and Dysentery. None.

Diphtheria. Four cases, all in month of June. Centre of town.

Fever, Malarial. None.

Fever, Typhoid. None.

Measles. One mild, month of January, 1887.

Scarlatina. None.

Whooping Cough. None.

5. No zymotic disease epidemic.

Bronchitis, Acute. None.

Pneumonia. Moderate prevalence. December.

Rheumatism. Moderate prevalence. September, November and December.

6. No diseases, had unusually large prevalence during the year.

7. Unusual fatality from heart diseases, hydrocephalus and tumors.

9. Some increased interest in regard to the importance of sanitary surroundings, in certain cases wherein I have strictly cautioned parties.

C. H. Yale, M. D.

PROVIDENCE COUNTY.

2. Cumberland and Lincoln.

3. Taking sickness of all kinds, there has been about the average amount during the past year.

Zymotic diseases have prevailed as follows:

Cholera Infantum. Small amount. Sporadic. June and July.

Diarrhea and Dysentery. Mild. Sporadic. Autumn. Not confined to any locality.

Diphtheria. Very little. Sporadic. One or two fatal cases on the Lincoln side of the Blackstone river.

Fever, Malarial. Very prevalent. Epidemic. Average. From May to November, spread through the village generally.

Fever, Typhoid. Scarcely any.

Measles. None.

Scarlatina. A few cases. Sporadic. Mild. June, October. High and Broad streets.

Whooping Cough. Small amount. May.

5. No other zymotic disease becoming epidemic.

Bronchitis, Acute. Average prevalence. Spring and Autumn.

Meningitis, Cerebro Spinal. Infrequent. Sporadic.

Pneumonia. Small number. Usual season.

Rheumatism. Average prevalence; mostly in November.

Stomach, Acute diseases of. Small number.

6. No diseases, not zymotics, had unusually large prevalence.

7. None attended with unusual fatality.

9. Have not seen much advance in public sentiment or views of individuals, nothing not previously reported in regard to the importance of sanitary surroundings.

G. B. HAINES, M. D.

2. EAST PROVIDENCE and adjoining towns.

3. Taking sickness of all kinds, there has been more than usual and of a milder type. No severe epidemic.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. Average. Mostly Riverside. Sporadic. Many cases due to local causes; bad water and drainage, from July to October.

Croup. One case each, February, May and December.

Diarrhea and Dysentery. Very few cases; mild; warm season.

Diphtheria. January to May and in December. Average severity; most cases in April. In each case, disease did not spread in neighborhood. Precautions were invariably taken to prevent its spreading.

Fever, Malarial. Mild. Epidemic. North part of town and on Fort Hill, where house drainage bad, and water unfit for use. Severe cases. One family were drinking bad water and taking anti-mal. remedies.

Fever, Typhoid. Mostly mild. Riverside In one family three cases severe, one fatal with double parotitis. Stable under house, obstructed house drain, no traps, deep well within 9 feet of wooden cesspool.

Measles. Mild. Sporadic. One whole family, December. No other case.

Scarlatina. Mild. Watchemoket. November and December. One case, child at Camp White, its parents had the disease at Central Falls. Their nurse was supposed to have carried the disease to the child who had not been exposed to it at home. They were convalescing when she went to see the child.

Whooping Cough. Mild. Watchemoket.

5. No other zymotic disease epidemic.

Brain, Inflammation and Congestion of. Small number. No particular season.

Bronchitis, Acute. Large prevalence. April, May, November and December.

Pneumonia. Average prevalence. Cold months.

Rheumatism. Average number through the year.

Stomach, Acute diseases of. Small number only. Summer.

6. No disease, not classed as zymotic, had unusually large prevalence, except acute bronchitis.

7, No unusual fatality.

8. See scarlatina above.

9. There is a decided advance in public sentiment and in views of individuals, in this town, in regard to the importance of sanitary surroundings and in means of preventing diseases. Have personal knowledge of such sanitary interest.

S. HUNT, M. D.

2. GLOCESTER with parts of BURRILLVILLE and SMITHFIELD.

3. Taking sickness of all kinds, there has been less than usual by ten per cent. during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. None.

Croup. None.

Diarrhea and Dysentery. Sporadic cases only. Mild. Principally during the warm months. No particular locality.

Diphtheria. A few cases. Sporadic; during December only. Severe, in Chepachet village.

Fever, Malarial. A few imported cases only.

Fever, Typhoid. None.

Measles. A few cases in Burrillville; mild.

Scarlatina. None.

Whooping Cough. Epidemic in the eastern part of Burrillville and Glocester. Fall and winter; mild.

5. No other zymotic disease epidemic.

Brain, Inflammation and Congestion of. Small number. December.

Bronchitis, Acute. Average. Cold months.

Meningitis, Cerebro Spinal. None.

Pneumonia. Average. In spring.

Rheumatism. Small, throughout the year.

6. What diseases, not classed as zymotics, have had unusually large prevalence during the past year? None.

7. No diseases attended with unusual fatality. Several deaths at advanced age. Duty Place, 103; Elijah Armstrong, 94; &c., &c.

9. No perceptible advance in public sentiment or views of individuals, in regard to the importance of sanitary surroundings.

ALBERT POTTER, M. D.
G. A. HARRIS, M. D.

2. JOHNSTON, parts of CRANSTON and PROVIDENCE.

3. Taking sickness of all kinds, there has been more than usual during the past year. Should estimate ten per cent. more.

Zymotic diseases have prevailed as follows:

Cholera Infantum. About the usual number but of more than average severity. Summer.

Croup. Average number. Spring and fall.

Diarrhea and Dysentery. More than usual, and quite severe.

Diphtheria. Scattered cases through the year.

Fever, Malarial. Increased prevalence in some localities. Almost epidemic. Average in all other places of prevalence.

Fever, Typhoid. About average. Mostly fall months.

Measles. Occasional, larger part of the year, increasing in December.

Scarlatina. Sporadic cases, scattered through the year.

Whooping Cough. Occasional, first nine months. Increased during fall months.

5. No other zymotic disease epidemic.

Brain, Inflammation and Congestion of. Small number.

Bronchitis, Acute. Large prevalence. Winter and spring.

Meningitis, Cerebro Spinal. Three sporadic only.

Pneumonia. Very large prevalence; severe. Winter and spring.

Rheumatism. Average in number and severity through the year.

Stomach, Acute diseases of. Few, not otherwise classed.

6. The diseases, not classed as zymotics, that had unusually large prevalence were pneumonia and bronchitis.

7. The diseases attended with unusual fatality, were pneumonia and cholera infantum.

8. The usual circumstances occurred that seemed to indicate that scarlet fever and diphtheria had been communicated from one person to another.

9. There is evidently some advance in public sentiment and in the views of individuals, in regard to the importance of sanitary surroundings.

GEO. R. FISHER, M. D.

2. LINCOLN, CENTRAL FALLS, VALLEY FALLS and LONSDALE.

3. Taking sickness of all kinds, there has been about the usual amount of disease during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. Average amount, usual season.

Croup. Two cases only.

Diarrhea and Dysentery. Moderate prevalence in the warm months.

Diphtheria. Quite prevalent in Central Falls, January, February and March.

Fever, Malarial. Very prevalent in August, September, October and November.

Fever, Typhoid. Only a few cases.

Measles. None.

Scarlatina. Few cases.

Whooping Cough. Average number.

5. No zymotic disease epidemic in Central Falls.

Brain, Inflammation and Congestion of. Small number.

Bronchitis, Acute. Average prevalence. Winter and spring.

Meningitis, Cerebro Spinal. None.

Pneumonia. Small prevalence, mostly in spring.

Rheumatism. Average through the year.

Stomach, Acute diseases of. Average number.

6. No diseases, not classed as zymotics, had unusually large prevalence.

7. No unusual fatality.

8. Nothing unusual.

9. Some improvement is noticed in public sentiment and in views of individuals, in regard to the importance of sanitary surroundings; and in interest in means of preventing diseases.

A. A. Mann, M. D.

2. Pawtucket and vicinity.

3. There has been about the usual amount of sickness of all kinds during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. About the average in number and severity.

Croup. Less than usual.

Diarrhea and Dysentery. Average.

Diphtheria. Not a great number of genuine; some quite severe; different months.

Fever, Malarial. Average number of cases. Generally mild and amenable to treatment.

Fever, Typhoid. Rather more than usual. Commenced unusually early. Some cases in July. Average severity.

Measles. Very little.

Scarlatina. Average; most cases mild.

Whooping Cough. Average.

5. No zymotic disease epidemic.

Bronchitis, Acute. About as usual. Fall and winter.

Pneumonia. Average number. Fall and winter.

Rheumatism. Average number. Fall and winter.

Stomach, Acute diseases of. None.

6. No very unusually large prevalence during the past year of any disease.

7. No diseases attended with unusual fatality.

Geo. H. Stanley, M. D.

2. Pawtucket and adjoining towns.

3. About the usual amount of general sickness.

Zymotic diseases have prevailed as follows:

Cholera Infantum. Considerable. Severe in July and August. Sporadic.

Croup. Small amount. January, February and December.

Diarrhea and Dysentery. No more than average.

Diphtheria. More than usual. Some cases all through the year; some severe. In all parts of town.

Fever, Malarial. Much, especially in September and October. Mild; in all parts of city.

Fever, Typhoid. Less than usual. Not severe.

Measles. Less than usual; mild.

Scarlatina. More than usual, but not epidemic. Cases all through the year. Average severity.

Whooping Cough. Usual amount.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Small number only.

Bronchitis, Acute. Average. December, January and February.

Pneumonia. Average prevalence. Cold months.

Rheumatism. Average prevalence. Fall and winter.

Stomach, Acute diseases of. Very small number.

6. No diseases, not zymotics, had unusually large prevalence.

7. No unusual fatality.

F. B. FULLER, M. D.

2. SCITUATE and adjoining towns.

3. Taking sickness of all kinds, there has been about the same as usual in my circuit during the past year.

Following zymotic diseases have prevailed during the past year:

Cholera Infantum. Average amount during July and August.

Croup. Very little.

Diarrhea and Dysentery. Prevailed to a limited extent, during July, August and September.

Diphtheria. Very little.

Fever, Malarial. Apparently endemic in localities throughout the year. Average type.

Fever, typhoid. Sporadic cases occurring all through the year.

Measles. Epidemic during December 1886. Average type.

Scarlatina. None.

Whooping Cough. Epidemic during September, October, November and December. Severe type.

5. No other zymotic disease epidemic.

Bronchitis, Acute. Average. November and December.

Pneumonia. Rather above the average. Fall and winter.

Rheumatism. Average.

Stomach, Acute diseases of. Average amount of gastritis.

6. No diseases, not classed as zymotics, had unusually large prevalence during the past year, except pneumonia.

7. No diseases attended with unusual fatality.

9. Not very perceptible.

W. J. Smith, M. D.

2. Scituate and Foster.

3. Taking sickness of all kinds, there has been an average amount during the past year.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. Average number. Summer and early fall. Mild.

Croup. None.

Diarrhea. Sporadic; mild.

Diphtheria. Sporadic; mild; four in one family, Rockland village.

Fever, Malarial. Increasing amount. Mild to severe. Spring, summer and fall months. A few during winter.

Fever, Typhoid. None of consequence.

Measles. None in West Scituate.

Scarlatina. None.

Whooping Cough. Cases reported in vicinity.

5. No zymotic disease epidemic in my circuit.

Bronchitis, Acute. Average amount. Early spring and winter months.

Rheumatism. Average amount. Spring months.

Stomach, Acute diseases of. Average amount. Fall months.

6. No diseases, have had unusually large prevalence during the past year, except malarial fever.

7. None attended with unusual fatality.

8. Nothing new.

9. None perceptible.

B. Arnold, M. D.

2. Smithfield and parts of adjoining towns, (Greenville circuit).

3. Taking sickness of all kinds, during the past year, I should think there had been hardly an average, but rather more than the year previous.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. About an average number of cases. Sporadic. Average type. Usual season.

Croup. Very little; mild.

Diarrhea and Dysentery. Average prevalence; mild; summer and fall.

Diphtheria. Full average. March, April, October and November, of average severity, though some cases were very severe.

Fever, Malarial. About an average in number of cases, and with a few exceptions, mild in type.

Fever, Typhoid. Less than average, and mild; fall.

Measles. A few mild cases in December.

Scarlatina, Not any.

Whooping Cough. Very little; mild.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Very little; mild.

Bronchitis, Acute. About an average, of average type; winter and spring.

Meningitis, Cerebro Spinal. No cases.

Pneumonia. Average amount, average severity with some severe cases; the worst cases during the spring months.

Rheumatism. Average amount. Moderate severity. No particular season.

Stomach, Acute diseases of. Very little. Average severity. Summer.

6. No diseases, not classed as zymotics, have had unusually large prevalence during the past year.

7. No diseases have been attended with unusual fatality.

9. I think there is a slight improvement in regard to sanitary conditions, owing to enlarged enlightenment on sanitary questions.

R. P. EDDY, M. D.

2. WOONSOCKET and vicinity.

3. Taking sickness of all kinds, there has been slightly less than the average during the past year.

The following zymotic diseases have prevailed as stated:

Cholera Infantum. Sporadic. Average severity. Usual season.

Croup. Sporadic. Average severity. Usual season.

Diarrhea and Dysentery. Sporadic. Average severity. Usual season.

Diphtheria. Small prevalence.

Fever, Malarial. Rather more than average; not specially severe.

Fever, Typhoid. Very little.

Measles. Very little.

Scarlatina. Very little.

Whooping Cough. Very little.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Average number.

Bronchitis, Acute. Perhaps little above average. Cold and damp months.

Meningitis, Cerebro Spinal. The usual number.

Pneumonia. Average prevalence. Winter and spring.

Rheumatism. Average prevalence all through the year.

Stomach, Acute diseases of. Small number.

6. No unusually large prevalence during the past year.

7. No unusual fatality.

9. No advance in sanitary sentiment noticeable.

G. W. JENCKES, M. D.

2. PROVIDENCE.

3. There has been about the average amount of sickness during the past year.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. Average prevalence.

Croup. About the average number of cases.

Diarrhea and Dysentery. Not excessively prevalent or severe. Usual season.

Diphtheria. More than an average number of cases, and many cases very severe.

Fever, Malarial. Sporadic cases in all parts of the city. Mostly during the last half of the year.

Fever, Typhoid. Average number of cases.

Measles. Very prevalent in southern and western portions of the city, during October, November and December.

Scarlatina. Present in the city during the whole year, but not epidemic.

Whooping Cough. Quite prevalent during the summer.

5. No zymotic disease had epidemic prevalence.

Brain, Inflammation and Congestion of. Average number.

Bronchitis, Acute. Large prevalence. Spring and autumn.

Meningitis, Cerebro Spinal. Small number. Sporadic.

Pneumonia. Large prevalence. First five months of the year.

Rheumatism. Small number. No particular season.

Stomach, Acute diseases of. Average number.

6. The diseases. not classed as zymotics, that had unusually large prevalence during the year, were pneumonia and apoplexy.

7. Diphtheria and apoplexy had unusually large proportional number of fatal cases.

8. Have seen frequent illustrations of the contagious nature of diphtheria.

9. General and increasing interest in sanitation. This has been due largely to the influence of the health department, which makes a careful inspection of premises where there are reported cases of infectious or epidemic disease and supplies printed directions regarding ventilation, disinfection, the sanitary care of clothing, etc.

G. D. HERSEY, M. D.

WASHINGTON COUNTY.

HOPE VALLEY, HOPKINTON, RICHMOND and EXETER.

3. Taking sickness of all kinds, there has been less than usual by 15 per cent. during the past year.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. There was but little.

Croup. Small number.

Diarrhea and Dysentery. Considerable diarrhea and some dysentery which yielded readily to treatment.

Diphtheria. There has been but very little diphtheria, and this of a mild form.

Fever, Malarial. A few cases only of malarial fever, during the past year.

Fever, Typhoid. A few sporadic cases all of which were mild.

Measles. Measles has been epidemic in some parts of Richmond and Exeter, of rather severe type, being associated with pneumonia in some cases.

Whooping Cough. Very little.

5. No zymotic disease epidemic, except measles.

Brain, Inflammation and Congestion of. Hardly a case.

Bronchitis, Acute. Very common. Winter months.

Pneumonia. Quite prevalent. Spring months and fall.

Rheumatism. Quite a good deal. Fall, winter and spring.

Stomach, Acute diseases of. More common than formerly. Limited to no time, with exception of cases of cholera morbus, during the time of green fruits and vegetables.

6. There has been quite a number of deaths from paralysis and apoplexy among the old.

No diseases have been attended with unusual fatality, except those which attacked the aged.

8. No unusual circumstances occurred that seemed to indicate that scarlet fever, diphtheria or typhoid fever had been taken or communicated from one person to another.

9. No perceptible advance in public sentiment or views of individuals, in regard to the importance of sanitary surroundings.

E. P. CLARK, M. D.

2. NORTH KINGSTOWN, parts of SOUTH KINGSTOWN, EXETER, etc.

3. Taking sickness of all kinds, there has been rather more than usual during the past year, perhaps one-fourth.

The following zymotic diseases have prevailed:

Cholera Infantum. Average. Sporadic cases. summer months.

Croup. A few cases through the spring months. One severe case in October.

Diarrhea and Dysentery. A usual number of mild cases.

Diphtheria. None.

Fever, Malarial. A few cases of malarial fever in the fall months, but one of them originated here. I had three cases from Auburn, R. I.

Fever, Typhoid. A rather larger number of cases than usual, and most of them took a "bilious" form.

Measles. None.

Scarlatina. Several cases in the fall months, in the north part of the south town. Average severity.

Whooping Cough. Some mild cases.

5. Chicken pox has been quite prevalent.

Brain, Congestion of. None acute; have had several chronic cases.

Bronchitis, Acute. Usual amount. Winter and spring.

Meningitis, Cerebro Spinal. None.

Pneumonia. A few mild cases. Winter and spring.

Rheumatism. Usual prevalence through the year.

Stomach, Acute diseases of. None.

6. No diseases, not classed as zymotic, had unusually large prevalence during the year.

7. No unusual fatality.

8. I consider scarlet fever contagious.

C. E. Maryott, M. D.

2. Wakefield circuit including South Kingstown.

3. Taking sickness of all kinds, there has been as much or perhaps more than usual during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. Sporadic. Average. Wakefield and Peacedale. During July and August.

Croup. No true croup. Some laryngismus stridulus, not severe.

Diarrhea and Dysentery. Average number of cases during summer.

Diphtheria. None. Some *so-called* cases. In five years practice have not seen a case of true diphtheria.

Fever, Malarial. None to my knowledge.

Fever, Typhoid. Few cases of average severity scattered through the year. I lost one patient from this disease in February, 1886.

Measles. Some cases now, January, 1887, in village of Kingston. Transmitted in first place from Providence. Rather severe form in some of the older patients.

Scarlatina. Has been prevalent in sporadic cases, during November and December, 1886. Mild form confined to no part of town. No connection traceable between cases.

Whooping Cough. Very prevalent. Epidemic, during September, October and November, in Rocky Brook, Peacedale and Wakefield. Mild.

5. Parotitis during September, October and November. Unusual tendency to complication with jaundice. Over whole town. Few cases now in village of Kingston.

Bronchitis, Acute. Average number, February, March and April.

Pneumonia. Average. December, February, March and April.

Rheumatism. Average, the year round.

Stomach, Acute diseases of. Average number. Summer.

6. No disease, not zymotic, had unusually large prevalence.

7. No unusual fatality.

8. In regard to circumstances that seemed to indicate that scarlet fever, diphtheria or typhoid fever had been taken or communicated from one person to another. Have seen no cases of diphtheria, but one of typhoid fever. Scarlet fever in my practice has been confined to families having had no communication. These families had each two to three cases.

9. There has been increased inquiry in regard to purity of water supply, which is some evidence of interest in the means of preventing disease.

P. K. TAYLOR, M. D.

2. SOUTH KINGSTOWN.

3. Taking sickness of all kinds, there has been the usual amount during the past year.

Zymotic diseases have prevailed as reported below:

Diarrhea and Dysentery. About average number.

Diphtheria. Not many malignant cases, but numerous instances of ordinary sore throat.

Fever, Malarial. A few cases.

Whooping Cough. Prevalent in the fall months.

5. Mumps. Epidemic whole year. Wakefield, Peacedale, Rocky Brook. Many severe cases. N. Pier, Tower Hill, &c.

Brain, Inflammation and Congestion of. Average number.

Bronchitis, Acute. Average prevalence. Winter and spring.

Pneumonia. Average prevalence. February, March and April.

Rheumatism. Average number through the year.

Stomach, Acute diseases of. Small prevalence. Summer and fall.

6. No diseases, not classed as zymotics, had unusually large prevalence during the year.

7. No diseases have been attended with unusual fatality.

8. As to diseases being communicated from one person to another, there have been a number of cases of scarlatina that seemed to be so taken.

9. Seemingly some advance in public sentiment, in regard to the importance of sanitary surroundings.

J. E. PERRY, M. D.

2. RICHMOND, CHARLESTOWN and eastern parts of HOPKINTON and WESTERLY.

3. There has been an average amount of sickness during the past year.

The following zymotic diseases have prevailed:

Cholera Infantum. None.

Croup. A few cases.

Diarrhea and Dysentery. An unusual amount during the months of August and September.

Diphtheria. Very few cases.

Fever, Malarial. Several imported cases.

Fever, Typhoid. There has been less typhoid than in previous years I think.

Measles. None.

Scarlatina. A few sporadic cases of scarlatina anginosa.

Whooping Cough. A number of cases.

5. No zymotic diseases epidemic.

Brain, Inflammation and Congestion of. A number of severe cases. July and August.

Bronchitis, Acute. Large number of cases in March and April.

Meningitis, Cerebro Spinal. One fatal case.

Pneumonia. Average amount. Winter and spring.

Rheumatism. Greater by 50 per cent. than usual. winter months.

Stomach, Acute diseases of. Not large in number.

6. No disease, not classed as zymotic, had unusually large prevalence.

7. No unusual fatality.

9. No perceptible advance in public sentiment or views of individuals, in regard to the importance of sanitary surroundings. In this village (Wood River Mills), there is no system of drainage, the cesspools in some cases being located near the wells, contaminating the water. I think the unusual number of cases of dysentery last fall, can be traced to this source.

A. H. Eccleston, M. D.

2. Westerly.

3. The amount of sickness for the past year in my circuit, was I should say about an average.

The following zymotic diseases have prevailed during the year:

Cholera Infantum. Very few cases.

Croup. About an average of ordinary years.

Diarrhea and Dysentery. Larger than average.

Diphtheria. Three cases reported.

Fever, Malarial. Has prevailed to an average extent.

Fever, Typhoid. There have been nine cases reported to me during the year, five of which were from Stillmanville, the remainder scattered.

Scarlatina. Four cases reported.

Small pox. None.

Whooping Cough prevailed during the spring and summer months extensively, many cases being very severe.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Average.

Bronchitis, Acute. Spring and fall average.

Meningitis, Cerebro Spinal. None.

Pneumonia. Average during the winter months.

Rheumatism. Full average.

Stomach, Acute diseases of. Usual number.

6. No diseases, not classed as zymotics, had unusually large prevalence.

7. No unusual fatality.

8. Nothing unusual.

9. There is an active interest manifested by the town council relative to questions of sanitary importance. A superintendent of health has been appointed and an ordinance adopted requiring physicians to report cases of contagious, infectious or epidemic diseases, thereby giving an opportunity to prevent the spread of disease. Blanks being furnished for said purpose, I herewith enclose a letter with copy of ordinance * as sent to each physician in the town of Westerly.

H. W. Rose, M. D.

2. Westerly and vicinity.

3. I should say taking sickness of all kinds, that there was rather less than in 1885.

The following zymotic diseases have prevailed:

Cholera Infantum. Summer diarrhœas in abundance during warm months. I have seen no well marked case of cholera Infantum.

Croup. Average of other years.

Diarrhea and dysentery Several well marked cases of dysentery, during December.

Diphtheria. Sporadic cases. Some very severe. Nine cases in three houses during November, but none fatal.

Fever, Malarial. Much less in its acute forms than in preceding years.

Fever, typhoid. Several typical cases, during October and November.

Scarlatina. Sporadic cases in December of average severity.

Whooping Cough. Was prevalent in the spring.

5. Possibly varicella.

Brain, Inflammation and Congestion of. Small prevalence.

Bronchitis, Acute. Average through the year.

Meningitis, Cerebro Spinal. Small number.

Pneumonia. Small prevalence.

Rheumatism. Large prevalence. January, February, March and December.

Stomach, Acute diseases of. Average prevalence.

7. Certain cases of diphtheria have been unusually fatal.

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* See town clerk's report.

9. Some advance in public sentiment, shown in regard to the importance of sanitary surroundings, and the appointment of a physician as superintendent of health and the enforcement of the ordinance requiring the reporting of contagious diseases.

F. T. Rogers, M. D.

2. Westerly.

3. Taking sickness of all kinds, there has been perhaps rather less than usual or surely not above an average.

The following zymotic diseases have prevailed:

Cholera Infantum. A few cases, mostly in summer months.

Croup. Very few.

Diarrhea and dysentery. Average prevalence, chiefly in summer.

Diphtheria. Have not known of any.

Fever, Malarial. About the same as in 1885.

Whooping Cough. Has been somewhat prevalent, but I have been called to treat only sequelæ and not the disease itself.

5. No zymotic disease epidemic.

Brain, Inflammation and Congestion of. Cerebro hyperæmia. A number of cases in spring and early summer.

Bronchitis, Acute. Average prevalence. Spring and winter.

Pneumonia. Average number. Winter and spring.

Rheumatism. Somewhat more than usual, chiefly in spring and winter.

Stomach, Acute diseases of. Average prevalence. Summer and fall.

6. None.

7. No diseases have been attended with especial fatality.

8. No new circumstances.

9. No very marked advance in public sentiment in regard to the importance of sanitary surroundings.

J. H. Morgan, M. D.

REPORTS FROM TOWNS

IN RELATION TO SANITARY IMPROVEMENTS, &C.

In continuance of the design to keep well informed of all proceedings throughout the State, on the part of town or city councils, or any form of municipal authority, in the appointment of health officers or boards of health, or in the direction of improvements which have in view and seem to promise the promotion of the public health ; by the abatement of nuisances; the removal of unsanitary conditions and surroundings ; or by the introduction of water for general use, or construction of sewers, or the establishment of other public works, which may not only be of great public utility and convenience, but also serve in some measure, large or small, in the prevention of disease, the secretary has as heretofore, solicited replies from the town and city clerks of the several towns and cities, or other municipal officers, in answer to questions proposed in a circular sent for that purpose.

It is hoped that a connected history may thereby be secured of all sanitary improvements of a public character in all parts of the State, from year to year, and the gradual awakening of the citizens of the different towns to the necessity of sanitary public measures shown, and also whatever intelligent appreciation of such necessity, and whatever public spirit in existence in the towns there may be, as manifested by the readiness with which needed sanitary measures are adopted.

The following is the form of circular sent at close of the year 1886:

CIRCULAR W.

OFFICE OF SECRETARY OF THE STATE BOARD OF HEALTH,

To the Town Clerk:

PROVIDENCE, R. I., Jan. 1, 1887.

It is, by statute law, made the duty of the Secretary of the State Board of Health, to make inquiries of the clerks of town or of local boards of health, (town councils where no legal board of health is appointed) in regard to the general health and sanitary condition of the towns, and also in regard to measures taken for the improvement of the same.

The law reads as follows:

PUBLIC STATUTES, CHAPTER 83.

SEC. 6. The secretary of the said board shall make inquiry from time to time, of the clerks of town and local boards of health and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health, in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals, in their several towns and localities, respectively; and the said clerks of town and local boards of health, and said practicing physicians, shall give such information, in reply to said inquiries, of such facts and circumstances as have come to their knowledge.

The Secretary therefore respectfully makes the following inquiries:

1. Has there been, within your knowledge, any very fatal or very serious disease, that has prevailed largely in your town during the last year?

2. Have there been any cases of small pox in your town during the last year? If any, how many cases and how many deaths have come to your knowledge? Do you know the source from whence derived?

3. Has any widely spread or largely fatal disease occurred among domestic animals in your town during the year? If any, please give name of disease or diseases, locality and time of the year when prevalent.

4. Has any work for the promotion of public health been comtemplated, commenced or completed in your town, by the proper authorities of the town during the year? If any, please state what.

5. If by introduction of water for general use, please state from what source, how large the supply, and what proportion of the population by estimation, were supplied with the same at the end of the year.

6. If by sewerage, state what the aggregate length of sewers, whether of iron or brick, where emptying, and what proportion of population had drainage connection with them at the end of the year.

7. If by abatement of nuisances, or by improvement in heating or ventilating public buildings, halls, school houses, &c., or by drainage of swamps, wet lands or water-soaked ground around and beneath houses, or by compelling the removal of excreta, garbage, house refuse, &c., from dwellings and villages, or for any other purpose. Please give terms and date of enactment of town ordinance, or send copy of same, and also state how far the ordinances have been enforced.

8. Has your town any legal board of health beside the town council? If so, please give the names of the officers of the same.

9. Do you have health officers in your town, responsible to town council, instead of an organized board of health? If so, please give names of said officers.

10. His gratuitous vaccination been provided in your town during the past year?

Respectfully,

CHAS. H. FISHER,

Sec. State Board of Health.

N. B. The town clerk should charge a remunerative fee for replying to the above circular, and present to the town council, it being a service required by law.

REPORTS FROM TOWN CLERKS.

In relation to the prevalence of disease, and to municipal proceedings in regard to public sanitary improvements, and the promotion of public health, &c.

BRISTOL COUNTY.

BARRINGTON.

1. There were several fatal cases of disease of the bowels at Drownville, near oyster houses. I think three died in one family; otherwise no largely fatal disease.

3. There were reported several cases of glanders.

5. No extension of water service for general use. Water was introduced from Warren for the benefit and at the expense of a few families at Nayatt.

7. No new ordinances in abatement of nuisances.

8. No legal board of health beside the town council.

9. The health officers are the town council.

10. Gratuitous vaccination was provided during the year. 120 persons were vaccinated out of about 1200, by Dr. Battey, and I vaccinated 32 myself, in all 152.

11. I think undertakers do promptly send in their returns of death. Mr. Buffinton of Warren is very prompt.

M. H. Wood, *Town Clerk.*

BRISTOL.

4. No special work for the promotion of public health was contemplated, or completed in the town by the authorities, during the year 1886.

5. About one-fifth of the population are supplied by water services.

6 No sewers of any account, a very few private ones where the premises are located near the harbor.

7. No new ordinances in abatement of nuisances, &c. See ordinance printed in Annual Report of State Board of Health, 1883, (for the suppression and prevention of nuisances) also law relating to nuisances in the town of Bristol same report, no provisions made by the authorities to compel the removal of garbage, house refuse, &c.

8. Town council the board of health.

9. Lyman B. Bosworth, health officer.

10. Gratuitous vaccination was not provided in this town during the past year.

11. Undertakers have promptly sent in their returns of death.

H. F. Bennett, *Town Clerk.*

WARREN.

4. Nothing new for the promotion of public health, by the town authorities during the year.

5. A system of water works was completed several years since. The water from water works is not generally used, but its use is gradually increasing.

6. Several streets are provided with sewers and one or two new sewers have been constructed during the year. All the sewers are private ones.

8. The town has no legal board of health, except the town council.

9. Alexander G. Sanford, health officer.

10. No gratuitous vaccination was provided for during the year 1886.

11. The returns of deaths have all been sent in.

C. B. Mason, *Town Clerk.*

KENT COUNTY.

COVENTRY.

4. No new work for the promotion of public health.

5. No public water service.

6. No public sewers.

8. Board of health, the town council.

9. Name of the health officer, David W. R. Bennett.

10. Gratuitous vaccination has not been provided during the past year.

11. Undertakers have promptly sent in their returns of death.

S. W. Griffin, *Town Clerk.*

EAST GREENWICH.

4. No work for the promotion of public health, except as reported below.

5. In regard to water service for general use, can report that the Greenwich Water Supply Company have just completed their works, and cannot tell what proportion of the inhabitants will take the water.

6. No public sewerage.

7. No new ordinances in abatement of nuisances, etc.

8. No board of health beside the town council.

9. Dr. James H. Eldredge, health officer.

10. No gratuitous vaccination provided during the past year.

11. Undertakers have promptly sent in their returns of death.

E. Stanhope, *Town Clerk.*

WEST GREENWICH.

1. No very fatal disease.

5. There is no water service for general use in this town.

7. No new ordinances in abatement of nuisances.

8. No board of health beside the town council.

9. The town council.

10. No gratuitous vaccination provided during the past year.

11. The returns required of undertakers have been usually promptly returned.

William N. Sweet, *Town Clerk.*

WARWICK.

3. Have not known of any largely fatal disease among domestic animals in this town during the year.

4. No work for the promotion of public health has been contemplated.

5. Water service for general use has not been introduced.

6. No public sewerage.

7. No new ordinances in abatement of nuisances have been adopted.

8. No board of health beside the town council.

9. The health officers of this town are Dr. A. G. Sprague and Dr. Dan. O. King.

10. Gratuitous vaccination has been provided during the past year. The proportion of the population vaccinated was by estimate about 4 per cent.

11. Undertakers have promptly sent in their returns of death.

J. B. Allen, *Town Clerk.*

NEWPORT COUNTY.

JAMESTOWN.

1. No very fatal disease has prevailed.

4. Nothing new for the promotion of public health.

5. No water service for general use.

6. No sewers except for private use.

8. No legal board of health beside the town council.

9. The town council are the health officers of this town.

10. No gratuitous vaccination has been provided during the past year.

11. Undertakers have promptly sent in their returns of death.

J. E. Watson, *Town Clerk.*

LITTLE COMPTON.

4. No work for the promotion of public health has been contemplated.

6. No sewerage in this town.

7. No new ordinances in abatement of nuisances.

8. No board of health beside the town council.

9. The members of the town council are the health officers of this town.

10. Gratuitous vaccination has been provided during the past year. About one-tenth of the population was vaccinated.

11. Undertakers have promptly sent in their returns of death.

F. R. BROWNELL, *Town Clerk.*

MIDDLETOWN.

1. In March, 1886, three persons, 2 children and one adult, died from diphtheria in one house in the northeast part of the town.

2. There were no cases of small pox in this town during the year 1886.

3. Have heard of no disease affecting domestic animals to any extraordinary extent.

4. The authorities of this town have not entered upon any works particularly designed to promote the public health.

7. The ordinance for the preservation of the public health adopted by the town council February 16, 1885, (a copy of which was returned with report of last year), was repealed May 17, 1886, it having failed in its execution to accomplish the purpose for which it was enacted.

8. The town council is the only board of health Middletown has.

9. Nathaniel L. Champlin, health officer.

10. Gratuitous vaccination was not provided in 1886. It was in 1885.

11. Undertakers of Newport have sent returns of deaths more promptly than in former years.

In December, 1886, the people living in the southerly part of Middletown complained to the health officer and town council of great annoyance and of sickness from the spreading of manure in their vicinity, composed in part of house offal and swill brought from the city of Newport. The parties spreading the manure were induced to suspend for a time, but the odor of that already spread will continue a source of annoyance until the ground opens and absorbs it. In view of the long continued difficulty arising from the bringing of swill and house offal from Newport to Middletown imperilling the health of our citizens, and in some instances injuring the sale and leasing of property, and of the inadequacy and insufficiency of existing laws and ordinances to effectually regulate and control this difficulty, a movement is to be inaugurated for the presentation to the General Assembly, at its January session, of a petition for the passage of an act, to prohibit altogether the bringing or transporting of any house swill or house offal from Newport to Middletown.

A. L. CHASE, *Town Clerk.*

NEW SHOREHAM.

3. No largely fatal disease occurred among domestic animals during the year.

4. Nothing new by the town council for the promotion of public health.

6. Private sewers only.

7. No new ordinances in abatement of nuisances.

8. No board of health beside the town council.

9. The town council.

10. Gratuitous vaccination has been provided during the past year. The proportion of the population vaccinated, about 145.

11. Undertakers have sent in their returns of death very promptly.

A. N. Rose, *Town Clerk.*

PORTSMOUTH

3. No disease among domestic animals.

4. No new work for the promotion of public health, during the year.

5. No water service.

7. No ordinances in abatement of nuisances.

8. No legal board of health beside the town council.

9. Town council.

10. Gratuitous vaccination has not been provided since the summer of 1885.

11. Undertakers have promptly sent in their returns of death, but do not always obtain the physician's certificate.

P. B. Chase, *Town Clerk.*

TIVERTON.

4. No work for the promotion of public health has been contemplated, by the authorities during the year.

5. No introduction or extension of water service for general use.

7. The council have passed no new ordinances in abatement of nuisances.

8. No legal board of health beside the town council.

9. The health officers are P. D. Humphrey, Saml. E. Borden, Christopher Manchester.

10. No gratuitous vaccination provided during the past year.

11. Undertakers have promptly sent in their returns of death.

J. T. Cook, *Town Clerk.*

CITY OF NEWPORT.

4. Work is in progress to carry sewage to safe point of deposit beyond Goat Island breakwater, and about one mile of new sewers built.

5. In relation to extension of water service for general use. The Water Works Co. put in about 8750 feet of additional mains during 1886, there are now 1832 services, supplying possibly one-half the population.

6. Of aggregate length of sewers 16½ miles completed, no *old* record exists, since May 1884 about 3000 people drain into sewers.

7. See new ordinances in relation to the public health following this report.

8. We have a local board of health elected annually by city council, consisting of three physicians and two other citizens, with an inspector or executive officer, who is elected on the nomination of the board annually. There has been no new election this year as yet, of either.

9. Capt. Wm. F. Townsend is health officer for quarantine; Wm. H. Bliss, inspector or executive officer of board of health; Charles H. Langley, inspector of nuisances.

10. Gratuitous vaccination is provided every year, by city physician, Henry E. Turner, do not know what proportion, all who would apply.

11. Undertakers all send returns promptly, are unable to obtain burial permits from board of health without returns.

WM. G. STEVENS, *City Clerk.*

ORDINANCES, CITY OF NEWPORT.

AN ORDINANCE RELATIVE TO THE PREVENTION OF DISEASE.

[Passed June 1, 1886.]

It is ordained by the City Council of the city of Newport, as follows:

SECTION 1. Hereafter no funeral of a person who shall have died of small pox, diphtheria, scarlet fever, yellow fever, typhus fever, Asiatic cholera, or of any contagious, infectious or pestilential disease, shall be held in any church, or be otherwise publicly conducted in said city; but every such funeral shall be as private as may be; and whoever shall unnecessarily attend such a funeral, or shall invite thereto, or shall knowingly suffer to attend thereat, any person whose attendance thereat is not necessary, shall be fined twenty dollars for each offence.

SECTION 2. Whoever shall, without the permission of the board of health of said city, remove, destroy, obliterate or deface wholly or partially, any printed or written notice which shall have been posted, set up or displayed to indicate the existence of disease in any house or premises, shall be fined not less than five dollars, nor more than twenty dollars for each offence.

A true copy. Attest:

WILLIAM G. STEVENS,

AN ORDINANCE IN AMENDMENT OF "AN ORDINANCE RELATIVE TO CEMETERY VAULTS AND ENTOMBMENT OF BODIES."

[Passed November 2, 1886.]

It is ordained by the City Council of the city of Newport, as follows:

SECTION 1. Section 1 of said ordinance is hereby amended by striking out therefrom the words "Board of Aldermen" and substituting therefor the words "Board of Health." Section 2 of said ordinance is hereby amended by striking out therefrom the words "Mayor or Board of Aldermen" and substituting therefor the words "Board of Health," and Section 3 of said ordinance is hereby amended by striking out therefrom the word "Mayor" and substituting therefor the words "Board of Health," and by striking out therefrom the words "City Clerk's office, for the Mayor," and substituting therefor the words "Office of the Board of Health."

SECTION 2. This ordinance shall take effect immediately.

A true copy. Witness:

WILLIAM G. STEVENS,
City Clerk.

AN ORDINANCE IN AMENDMENT OF "AN ORDINANCE RELATIVE TO THE REGISTRATION OF BIRTHS AND THE REPORTING OF CERTAIN DISEASES."

[Passed November 2, 1886.]

It is ordained by the City Council of the city of Newport, as follows:

SECTION 1. Section 1 of said ordinance is hereby amended so as to read as follows: "Section 1. Every physician shall within the first week of every calendar month deliver and leave at the office of the Board of Health, a return signed by him of every birth at which he shall have attended in said city during the last preceding calendar month, and such return shall be made out in the form prescribed in Section 3 of chapter 85 of the Public Statutes of this State; and every physician shall within the first week of every calendar month, if he shall not have attended any birth in said city during the last preceding calendar month, notify the Board of Health, in writing that he has not attended any birth in said city during such preceding calendar months."

SECTION 2. Section 2 of said ordinance is hereby amended by striking out the words "City Clerk's office" and substituting instead of them the words "Office of the Board of Health."

SECTION 3. This ordinance shall take effect immediately.

A true copy. Witness:

WILLIAM G. STEVENS,
City Clerk,

Extracts from the Inaugural address of Mayor J. H. Powell.

HEALTH.

This city has, with the exception of some severe cases of diphtheria last winter, most of which, if not all, were traceable to the surroundings, been remarkably healthy. The board of health showed a most commendable spirit in taking care of the disease mentioned, and in having the premises promptly disinfected and cleaned. The inspector of nuisances has done his duty thoroughly, faithfully, and well, and is an excellent officer. He reports the city, I am happy to say, cleaner than it has been for years.

SEWERS.

This all important matter has made a satisfactory amount of progress, when the amount of money available for the purpose is considered, during the year more than a mile of sewer having been built—and the main sewer outlet through the breakwater on Goat Island is fairly under progress of construction—and the vital objection of converting our inner harbor into a cesspool removed in the near future. The contracts for building the retaining walls of the existing portion of the main sewer outlet, for furnishing the iron sewer pipe, and for laying the same across the harbor, having all been awarded, and the prices at which the contract have been taken are all within the estimated cost. Work on the retaining walls has been commenced and considerable progress has been made. The iron pipe is being cast, and every indication points to the completion of this work before the commencement of the next summer season and when completed it will be an immense improvement in the condition of affairs as they now exist. The small amount of money available for sewers last year, prevented as much progress being made as ought to have been done when the state of the sewerage in this city is considered, for it is a point on which the most strenous efforts should be made by every citizen—for it is one that effects all alike, at once, for the state of the drainage, or rather the want of it, in the old part of the city, as well as in some of the large houses on the avenue, can hardly be believed, unless seen. I accompanied the inspector of nuisances on a tour of inspection last spring, and I must say, frankly, that I saw many houses and places in a condition—(with no way of bettering many of them, permanently or properly)—that I could not have believed it possible if I had not seen them myself, and a reckless, callous disregard for human health and life displayed, that was hard to believe could be justified in any way, or by anyone—no drains, no sewerage, tubs overflowing with filth for cesspools, houses without cellars, the filth running under them, no regard to any sanitary conditions whatever. It may be all very well and economical to wink at such a state of affairs so long as nothing happens—but how would it be if this city was visited by any epidemic? This town should be provided with a complete system of drainage, or as much of the system as can be brought about AT ONCE, and no more time spent in talking about it, or any hindrance put in its way. The system, which has been adopted, was designed by most competent engineering skill, was approved, in any minor alterations that have been made on the score of economy, by equally recognized engineering skill of your own selection and there is no cause for delay and it is the bounden duty of every man in the city—rich or poor, for it is a common cause—who has the interest and welfare of Newport at heart, to see that means are furnished to carry it out without delay. I believe it would be money well invested for the city to issue bonds to put the whole system in at once, or at the very least the main trunk sewers—and be done with it, and let those who come after us, and who will be far more benefited than those of the present day, by the increased prosperity, popularity, and population, help pay the expense. This city has a debt of only about $131,000 all told to-day, and if by creating a debt of not immoderate proportion to its size for so all important an object, it can remove the dangers threatened by the present want of sewerage—and equally important—remove the chance of any possible check to her prosperity as a watering place—by even a groundless scare, or feeling of insecurity—it should be done. Thames street must be repaired before long, and it would be only an economy to put in the Thames street sewer at all events, before it is repaired, and by overhauling the condition of gas and water mains, and making the connections to each estate, as far as the curb stones, as I suggested to you last year the street need not be disturbed again for years except for repairs absolutely necessary to said pipes or pavement. You may blame me possibly as being too progressive—of speaking too plainly, but it is my duty to do so. My ideas may, of course, be all wrong, but honestly holding them, it is only right for me to express them openly to you, for your consideration, should you deem them worthy of it, and in any event, to place myself on record as having recommended that which I am positive it is my duty to do.

SANITARY PROTECTION ASSOCIATION.

The annual meeting of the Newport Sanitary Protection Association was held Tuesday, July 14, the President, Hon. Francis Brinley, occupying the chair. Reports were presented by the several officers, and it was voted that a copy of that of the Recording Secretary be sent to the *Daily News* for publication. It having been stated that Dr. Rives and Mr. Bell declined re-election as Recording Secretary and Inspector, the thanks of the association were voted to those gentlemen for their efficient services during several years. It was voted that hereafter the monthly meetings be held as formerly, at the houses of the members.

Attention having been called by Dr. Rives in his annual report to the filthy and dangerous condition of the "dumping ground" at the Point in the vicinity of the railroad track, the President and Secretary were appointed a committee to communicate with the president of the Old Colony railroad corporation, representing that the present condition of the premises in question was a disgrace to that company as well as to the city, a public danger and calculated besides to prejudice strangers arriving in Newport either by the cars or the New York boats against either a temporary or prolonged residence in the city.

The following officers were elected for the ensuing year:

President—Hon. Francis Brinley.
Vice-President—William C. Rives.
Recording Secretary—Dr. William Thornton Parker.

Corresponding Secretary--Dr. Horatio R. Storer.

Councillors—Lucius D. Davis, Dr. Francis H. Rankin, George C. Mason, Francis O. French, Dr. Ezra Dyer, Dr. W. C. Rives.

Consulting Engineers—Col. George E. Waring, Jr., Capt. J. P. Cotton, George N. Bell.

Chemical Analyst—Prof. William B. Hills, M. D., of Harvard University.

The following is the annual report for the year 1885–6: The year which has elapsed since the last annual meeting has been marked, it must be acknowledged, by a want of activity on the part of the association, and consequently merely a few brief statements are required in reviewing the work it has accomplished in that time. Partly, it may be, because the city now possesses a board of health which is expected to attend to everything needful, or to whatever combination of causes it is owing, it is plain that the interest taken in the Sanitary Protection Association has declined, temporarily it is hoped, for it must certainly be a matter of great regret to all thoughtful persons, that an association like the present one, whose purposes and aims are so evidently for the advantage of the community, should in any degree languish for want of proper encouragement. Especially is it to be observed that there are still many prominent citizens, including a large proportion of the physicians and clergy, who are not members, although the latter are entitled to free inspection of their premises, after having paid the annual dues, a privilege, perhaps, of which they are not all aware. Many members formerly active seem also to have lost their interest and have not been present at the monthly meetings.

However, though the association is not now receiving a hearty support in the immediate scene of its labors, it has been the pattern after which other flourishing societies for the same objects have been formed. It was mentioned with high commendation at the last meeting of the American Medical Association, and, at the request of the Improvement Association of Germantown, Pa., one of its officers visited that place to explain the principles and methods of sanitary protection. It is, in short, regarded as the parent of all similar societies in the United States.

Some interesting and instructive informal lectures upon the "Hygiene of the Dwelling," were delivered by the Inspector last autumn and should have had a larger audience than was actually present. It would greatly arouse an interest in the association if similar lectures upon various sanitary subjects could be given from time to time at the regular meetings. But few inspections have been made during the year. The library continues to receive important accessions. Dr. S. W. Francis, a valued member of the council, died in March last, deeply regretted.

As to the general state of the city and questions relating to the public health, these subjects are sufficiently considered in the annual report of the board of health. It is enough to say that progress in the management of health matters continues, though the importance of proper attention to sanitary conditions is very imperfectly realized by large numbers of the population and by many others disregarded. If any one still doubts that there is abundant opportunity and need for sanitary work of all kinds in Newport, an inspection of the district in the neighborhood of the gas works, which will serve as an illustration of the condition of many other sections, will quickly convince him of the fact.

The system of sewerage has been examined by a committee of consulting engineers and favorably reported upon, but the construction of the settling tank and submarine outlet off the foot of Marsh street has not yet been commenced, and there is no good reason why this delay should be suffered to continue. The much talked of coves near the railway station are little altered, except that the smaller one, west of the railway, has been partially filled up, but to some extent with unsuitable rubbish and refuse material, which is improperly placed there. There is no change for the better in the quality of the city water.

Several outbreaks of infectious disease have occurred, which have further emphasized the necessity for a suitable building for such cases, especially as there is a good deal of recklessness and want of consideration for others exhibited by many persons, in neglecting necessary precautions against the spread of contagion, but the need of a satisfactory locality where such a structure could be built still exists, although efforts have been made to secure one.

An intention has been shown by the executive department of the city to enforce many existing sanitary rules which have been too long neglected, and at the suggestion of the board of health new regulations have been made. The mayor has given his hearty sympathy and assistance to the board of health, which it is hoped will more and more effectively deal with the health problems of the city.

Another subject of great importance on account of its bearing upon the public health has been the preparation of a building law, which the State Legislature has authorized the city to adopt, and which if it is passed, after some modification, will be a considerable step in advance—although when first submitted to the city council, a section in regard to plumbing and the registration of plumbers was entirely rejected, which is a further evidence of the excessive caution exercised in granting sufficient power to the health authorities, and in consequence of which the law was deprived of much of its value. It is highly to be desired that the above mentioned or a similar section should yet pass, even if some alterations should be made.

In accordance with its object of aiding in the improvement of the sanitary state of the city, the association has directed the attention of the board of health to several conditions requiring to be remedied, and it may thus be the means of effecting much good, especially if definite suggestions are given rather than advice of merely a general nature.

The board with its limited powers and small executive force under its direction, is unable as yet to exercise a satisfactory control over the sanitary affairs of the city and any real assistance that it receives from the Sanitary Protection Association should be gladly welcomed. However, even supposing the board of health was in a position to accomplish all that could be reasonably expected, as the association has always claimed, its object is not to supersede a board of health, no matter how efficient. The Sanitary Protection Association of London, for example, although the management of the health matters of that city has attained a high degree of excellence, is a society of great usefulness, in a thriving condition. As has been clearly pointed out, (The Sanitarian Vol. 7, p. 99), the work of boards of health, though necessary, is effected in great measure by compulsion, which often inclines owners to regard with aversion the measures which they are required to carry out, while the principle of sanitary protection appeals to the individual's own interest and advantage and from his own he is further led on to take an interest in the city's welfare. Moreover, an inspection made with the full consent of the owner, will often disclose defects which would not come under the observation of the officers of a board of health.

One of the chief objects of this association, also, is the diffusion of sanitary knowledge, for if each individual would endeavor to attend to his duty in keeping his premises in proper order, the work of the health department would be greatly lessened. Another important purpose is "to enable members to procure practical advice on moderate terms, as to the best means of remedying defects in houses of the poorer class in which they may be interested." This should be borne in mind by owners of tenement houses, of which there are many in Newport in a highly unsanitary condition. The plea of ignorance of the state of such premises should not be brought forward as an excuse, while the Sanitary Protection Association affords this opportunity.

In conclusion, while it is a matter for regret that so little attention should have been paid to the circulars recently sent out by the association—for even if no inspection is desired, it might at least be expected that the sympathy of the community in the work should be shown by an increase in the number of members—it is hoped that when the value of such a society is more fully realized, the association will receive all the support it needs.

William C. Rives, Jr., M. D.,
Recording Secretary.

PROVIDENCE COUNTY.

BURRILLVILLE.

4. There has been no such work.
5. No water service.
6. There is no public sewer system in this town.
7. No new ordinances in abatement of nuisances.
8. No legal board of health beside the town council.
9. George O. Fairfield, Pascoag, R. I., health officer.
10. No free vaccination since A D. 1885.
11. While the death returns have not been always made quite as promptly as the new law requires, in all cases, still there is no reason for special complaint.

Alvah Mowry, *Town Clerk.*

CUMBERLAND.

4. No particular work for the promotion of public health contemplated by the authorities during the year.

5. By extension of water service for general use, about three-quarters of the population in this section supplied. (See report of Pawtucket Water Commissioners.)

6. No sewerage of a public character.

7. No new ordinances.

8. No legal board of health beside the town council.

9. Health officers, Dr. Thomas W. Hague, Ernest L. Jencks.

10. No gratuitous vaccination provided during the past year.

11. Undertakers have promptly sent in their returns of death.

H. A. Follett, *Town Clerk.*

CRANSTON.

No report.

EAST PROVIDENCE.

No report from the town clerk.

From D. S. Ray, Esq., received the following in relation to water service:

5. About 300 new takers of Abbott Run water during 1886. About 5,700 feet new house service supply pipes during the year. About 4,400 persons now supplied. Whole length of street mains about 9 miles. Water corporation not municipal. (See report of Pawtucket Water Commissioners on subsequent pages.)

6. About one mile of public sewers in Watchemoket.

8. No board of health except town council.

9. Dr. Simeon Hunt, health officer.

10. Vaccination was provided by the town.

11. Some undertakers are delinquent.

FOSTER.

3. No largely fatal disease of animals known.

4. Nothing done for the promotion of public health, except appointing health officer.

7. Nothing done in abatement of nuisances.

8. The town council is the only legal board of health.

9. Henry Arnold, M. D., health officer.

10. No gratuitous vaccination provided during the past year.

11. Undertakers have promptly sent in their returns of death.

L. Howard, *Town Clerk.*

GLOCESTER.

1. No very fatal disease has prevailed largely in this town during the last year to my knowledge.

4. No action has been taken for the promotion of public health by the town authorities during the year.

5. There is no water service for general use.

8. No legal board of health beside the town council.

9. Health officer, G. A. Harris, M. D.

10 There has not been any gratuitous vaccination during the past year.

11. The undertakers have promptly sent in their returns of death.

C. W. Farnum, *Town Clerk.*

JOHNSTON.

4. Nothing new for the promotion of public health.

5. In relation to water service for general use, the water mains are extended on Old Killingly road beyond Manton. Can't say as to the exact number of families supplied by the extensions, probably a half dozen.

6. No public sewers.

7. No new ordinances since last year.

8. No board of health beside the town council.

9. Health Officers—Elmer B. Eddy, M. D.; Elmer T. Fiske, M. D ; Thomas C. Lawton, M. D; Chas. A. Barnard, M. D.; Eugene F. Hamburg, M. D.; Wm. A. Carroll.

10. No gratuitous vaccination provided

11. Undertakers have promply sent in their returns of death. I think no cases of neglect have come to my knowledge.

Wm. F. King, *Town Clerk.*

LINCOLN.

4. A trunk sewer is now being built from High street to Mill street, from Mill street to Cross street and from Cross street to Blackstone river; whole length about 1,300 feet.

5. About nine-tenths of the population by estimation was supplied with water at the end of the year. (See report of Pawtucket Water Commission on subsequent page.)

6. None at present. When the new sewer referred to is built it will accommodate but very few of the population comparatively.

7. We are now having the ordinances revised and will send one when printed.

8. No legal board of health beside the town council.

9. Samuel L. Pendergrass, Central Falls, R. I., health officer.

10. No gratuitous vaccination provided during the year.

11. Undertakers have promptly sent in their returns of death.

William H. Gooding, *Town Clerk.*

NORTH PROVIDENCE.

4. Nothing new for the promotion of public health.

5. No water service for general use.

6. No public sewers.

8. The town council is the board of health.

9. Sanford E. Kinnecom, health officer.

10. No gratuitous vaccination during the past year.

11. All undertakers do not promptly send in their returns of death.

T. H. ANGELL, *Town Clerk.*

NORTH SMITHFIELD.

1. I do not know of any.

4. There has been no action for the promotion of public health, by the town authorities during the year.

5. There is no water service for general use in this town.

6. No public sewers.

8. No legal board of health beside the town council.

9. Joshua Wardle, health officer.

10. All vaccinated about a year ago, that wished to be, about 700.

11. No undertaker located in this town. What returns of deaths not sent in by physicians, are taken in January by school census enumerator.

B. ANDREWS, *Town Clerk.*

PAWTUCKET.

No report from the city clerk.

The following information was obtained from other sources:

3. No unusual disease among domestic animals.

4. Appropriations were made for various purposes of a sanitary character.

5. Considerable sums were made use of to repair damages by the freshet in February and to extend the water service. (See extracts from Water Commissioners' report following.)

6. (See report of Sewer Commissioners following.)

9. Health officers, George H. Stanley, M. D., S. S. Tompkins.

10. Gratuitous vaccination was provided.

WATER COMMISSION.—PAWTUCKET.

EXTRACTS FROM THE REPORT OF THE SUPERINTENDENT.

Our works in common with the whole country round about us did not escape the effects of the flood of February 12, 1886.

The heretofore almost unknown rainfall of more than 8 inches in less than 36 hours with a body of snow already on the ground that, when melted by the rain, made at the least estimate 10 inches, was something more than human foresight could prepare for.

The damage at the new reservoir was not so extensive as might be supposed by looking at the ruins, yet it was a source of much labor.

The actual loss and damage to the work was repaired and made good by labor almost entirely at a cost of perhaps $2,000.

* * * * * * * * * *

Table showing the flow of Abbott's Run Stream at Diamond Hill Reservoir, calculated from Gauge Readings taken under the direction of S. B. Cushing, civil engineer, 7 months, 1886:

	Total flow in gallons per month.	Average flow per 24 hours.
May	204,824,198	6,607,232
June	51,903,289	1,730,110
July	9,782,512	315,565
August	15,849,147	511,263
September	12,714,533	423,818
October	22,829,770	736,444
November	198,384,156	6,612,805

At Happy Hollow, Valley Falls, the predictions of 1881 and 1882 were verified, and the time came about February 12, 1886, that the old dam was no more.

At this point it is but justice to say that delay, an unnecessary delay, has been stamped on every effort to replace the dam and repair the damage done by the flood. While I recognize a willingness and desire for prompt action on the part of your honorable board, and a hearty response and action on the part of the city government to have all in their power done to further the work, there has been an undercurrent that has seemed bound to make delay and retard the commencement of work to the latest moment.

While these conditions were not to be controlled by us, and have been a source of annoyance from the first, it only remains to be hoped that the delay will not cause further serious trouble or loss.

Another obstacle destined to further our delay was found in the unsatisfactory condition of the foundation that we had supposed secure to build upon.

Nothing short of sheet piling, and lots of it, would suffice to make the lower strata of the river-bed and banks secure beyond doubt.

Our conviction from observation is that whoever builds heavy structures or dams on the stream with which we are connected and does not make sure of a foundation below the first hard pan bottom, is not secure, and will sooner or later have trouble with the work.

* * * * * * * * * *

The work done here will bear inspection, and from foundation to coping is placed there to stay.

STATION NUMBER ONE.

The Corliss engine here still continues to run with the same ease and efficiency that has marked its career since it was first started.

When we consider the fact that since January 31, 1878, when it was started, it has run 32,220 hours, equal to ten hours in every working day for more than ten years' continuous service, it is fair to assume that this is an almost unprecedented record.

The repairs for the eight years and ten months on the engine boilers, and station connections in general have cost $2,356.77, and $700 of this amount was caused by being obliged to run the engine when we knew it ought not to be.

This is a very small percentage on the cost of the machinery.

The average duty obtained since starting, to date, is 109,126,720 foot pounds, and it continues to furnish the same kind of cards from the pumps and cylinders as when first started, and the invitation of six years ago to mechanical men to call at the station for cards taken at sight without notice of coming is still open.

This station has been in charge of John H. Walker for the past eight years, and I can say that everything connected therewith is always ready for duty, while at station No. 2, S. Frank Fisk takes great pride in his work and in explaining the grand combination of pumping arrangements and filter system.

EXTENSION OF MAINS.

In January we had about one-half of the special appropriation for extending and connecting lines unexpended.

During the season of 11 months there have been laid 5,963 feet of 8-inch pipe, 13,913 feet of 6-inch pipe, 1,577 feet of 4-inch pipe and under, part of them in adjoining towns.

* * * * * * * * * *

APPLICATION FOR SERVICES.

In Pawtucket	169
On the Lonsdale and Valley Falls division	53
" " East Providence division	45
" " Ashton division	8
" " Central Falls division	58
Total of	333
Added to previous number	4305
	4638
Less about 140 that have been discontinued or combined	140
with others, leaving as the number to be accounted for about	4498

Services have been added:

161	In Pawtucket.
50	On the Lonsdale and Valley Falls division.
45	" " East Providence division.
7	" " Ashton division.
58	" " Central Falls division.
321	
4165	Previous number in use.
4486 34	Less number discontinued and combined with others.
4452	Number now in use.

* * * * * * * * * *

Mains laid, 4-inch and larger	20,602 feet.
" " less than 4-inch	777 feet.

Public hydrants added, 17.
Private " " 14.
Hydrants now in use, 753.
Pressure at office day and night, 105 to 110 pounds.

Kind of service pipe used, principally tarred wrought iron, size, 1-inch and larger.

Services added	321
" now in use	4,452
Meters added	226
" now in use	2,590
Motors now in use of 1-horse power and upward	10

Table showing amount of rain and melted snow for eleven months ending November 30, 1886:

January	6 740
February	11.177
March	3.439
April	2.448
May	3.686
June	1.312
July	3.017
August	3.037
September	2.715
October	3.269
November	4.050

Total rain and melted snow, 44.890 inches.

* * * * * * * * * *

The foregoing report, describing as it does, a large amount of labor performed, does not in the least indicate that there is not much more to do, but presents a picture of ever-gaining and enlarging bounds, that tells of increased responsibility, labor and care, that the gratifying results in revenue and general success, shall keep pace with the growth of the works in all its parts.

I would recognize the value of my subordinates both in the office and on the work in general, for the efficient and faithful manner in which the details of plans and orders given have been executed.

My report would not be complete without thanking the board for their co-operation, advice and assistance at all times, and I desire to thank the city government for the interest manifested in the work and prompt action in time of need.

Respectfully submitted,
EDWIN DARLING, Superintendent.

SEWER DEPARTMENT.

Extracts from the Report of the Sewer Commissioners:

July 16th an explosion of naphtha gas occurred in the sewers. The first explosion occurred in the old stone drain in front of Cole's block, tearing up the street pavements and cracking the sidewalks. Wherever there was a connection with the old drain the street and sidewalks were cracked. The old stone drain was connected with the new brick sewers by a twelve-inch connection at the foot of Dexter street, and an eight-inch connection at Maple street. The second explosion was at the man-hole in front of the Odd Fellows block, followed by explosions at every man-hole on the Main street sewer and the main intercepting sewer. As nearly as can be determined there were thirteen distinct explosions.

* * * * * * * * * *

Under directions of A. R. Sweet, superintendent of sewers, all the man-hole covers on the line of the explosion were removed and the sewers thoroughly ventilated.

While the sewers were being ventilated the superintendent began searching for the cause of the explosion. He visited and examined a well or settling basin belonging to the Union Wadding Company and situated on the railroad. This well is used as a settling basin or slump on the drain built a number of years ago by the Conant Thread Company and the Union Wadding Company, (the Conant Thread Company were not using the drain at this time). It is also used as a collecting basin for the small drains of the Union Wadding Company. The next morning our superintendent, accompanied by two members of the city council committee on sewers, the city engineer, one of the sewer department foremen and one pipe layer again visited this well; they also made a thorough examination of the Union Wadding Company's naphtha works, in which they were kindly assisted by H. A. Stearns, superintendent of the Union Wadding Company's Works. A pail of the water and material was taken from this well; it had an oily appearance and had a very strong odor of naphtha. Upon a lighted match being being brought within two feet of the pail, an explosion occurred. The material took fire and burned for nearly half an hour. This experiment was tried several times. From the above facts and from explanations given by Mr. Stearns, your commissioners have no doubt that the naphtha gas which caused the explosion came from the Union Wadding Company's Works.

The committee on sewers had, through their engineer, in 1884, cautioned the Union Wadding Company in regard to letting naphtha into the sewers and they had promised to take all necessary precautions to prevent it. Furthermore by order of the town council of 1885, all parties connected with the Main street old drain had been ordered to disconnect This order had not been complied with by the Union Wadding Company.

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DEXTER YARN COMPANY'S CONNECTION.

Under orders from your honorable body and according to directions from the committee on sewers of the city council, although against our protests and judgment, we connected a cesspool belonging to the Dexter Yarn Company, with the Greene street overflow sewer.

This sewer, forty-eight inches in diameter, was built without house connections and was dry, except during a rain storm or during a thaw in winter. It was designed as an overflow sewer only. Previous to our making this connection there had been no complaint made against this sewer; since the connection has been made there have been numerous complaints about the stench arising from this sewer, especially during the months of July and August. The sewer has been flushed, but that did not remedy the evil. The stench came from the cesspool and drain. It fills not only the Greene street sewer, but also the East avenue and South Union street sewers.

FLUSH TANKS.

There have been constructed during the past year three flush tanks, making the total number in use seventeen. The automatic flush tanks (Rogers Field new pattern) still continue to give perfect satisfaction. The only care they have received during the past year was the regular monthly inspection, when the inspector removed the regulating bibb, blew out any sediment that might have collected in the water supply pipe, replaced the bibb and left it for another month. We have yet to find the first tank out of order.

The flush tanks have kept the sewers clean. There is no sewer in which there is any deposit, excepting the unfinished thirty-inch brick sewer in Pine street, the outlet of which is at present thirty-one inches above the bottom of the Pine street sewer, and through an eighteen-inch sewer. The Pine street sewer should be extended to its outlet into the Main street sewer at the earliest possible moment.

MAN-HOLES AND LAMP-HOLES.

There have been constructed during the past year thirty man-holes and twenty-six lamp-holes. We find in outlying parts of the city (Cottage street, Carnation street, Pine street and Waldo street), that children put sticks, stones, pieces of iron, etc., through the ventilating holes in the covers of the man-holes and lamp-holes. These the flush tanks are not able to wash out. They are liable, if not discovered and removed, to cause a stoppage in the sewers.

The only stoppage or deposit of any kind during the past year, was one in the Pine street sewer, caused by an iron poker being dropped through a lamp-hole cover and standing upright, thereby stopping paper and rags as they came through the sewer until it was completely blocked. Upon being reported at the department office this obstruction was removed before any injury had been done. We have had a monthly inspection of the sewers made and all sticks, etc., that dropped through the covers removed. As many as nineteen pieces of sticks and baled hay iron have been removed from the Carnation street sewer at one inspection. To prevent this dropping of things through covers, we recommend that an iron pan be placed under each man-hole and lamp-hole cover. To do this we would recommend that an appropriation be made to commence placing these pans in man-holes and lamp-holes where the most trouble is experienced.

CATCH-BASINS.

We have caused to be constructed during the past year, forty-one catch-basins and three gutter grates, the total number of catch-basins constructed by the sewer department is 148. There are in all 162. The care of catch-basins was placed by your honorable body in the hands of the commissioner of highways. There are many of these basins that should be cleaned out after every storm, especially those nearest the upper end of each sewer. After cleaning out a catch-basin it should be washed and refilled with clean water to the flow line of the trap. Refilling a basin is the only way to prevent the sewer air from mingling with the outer air at the sidewalk. On sewers where the sewage is warm, as in Pine street, Main street and the intercepting sewer, it is the only way to prevent steam from escaping into the street.

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This commission has been called upon to give estimates of the cost of most of the sewers ordered constructed. We are pleased to be able to report that whenever we have given an estimate and an appropriation has been made according to our estimate, in no case have our expenditures exceeded our estimate and the appropriation. In making estimates for sewer construction, provision has always to be made for close sheet piling, ground water and bad excavation. When the excavation is good, with no ground water, or there is no necessity for close sheeting, there is just so much money saved to the city, as on the Weeden street sewer.

* * * * * * * * * *

At the commencement of the construction of the Division street sewer and realizing the magnitude of the work, we obtained the most approved modern appliances. We purchased a steam drill and an electric blasting dynamo. We are using the safest high explosive on the market, "rack-a-rock." This explosive comes in two parts and cannot be exploded until they are mixed, the mining being done just before loading the hole. We have fired eight hundred holes, the greater part being full of water. There has been but one misfire and that was caused by a cut wire, and but four times has there been any glass broken, although there were houses within fifteen feet of the blasts.

Until the quantity of excavated material became so great as to fill the street, we used a derrick and hoisting engine. At present we are using a "Carson trenching machine." This is much more safe for the men in the ditch, and does not block the sidewalks. It excavates and backfills at the same time. At present we are blasting in the seventh ledge met in coming from the river. We have blasted into this ledge about two hundred feet, the average depth being twelve feet. This ledge will extend about three hundred feet farther, is gradually rising, and at Summit street will be on the surface.

The house connections through the ledge and deep excavation are built into the top of the arch of the sewer and are carried up to within ten feet of the surface of the street, or to the top of the ledge. Invert blocks are laid in the bottom of the sewer and at present they are carrying a good two-inch stream of water out of the ground. Care is being taken to provide good drainage to these blocks.

HOUSE CONNECTIONS.

The number of house connections with the sewers steadily increases. Below is given the number of connections and the number of buildings connected to December 1st, 1886.

Since January 1st, 1886, there have been 85 connections with the sewer, connecting 72 houses, 12 blocks, 26 stores, 3 stables and 6 manufactories. The total number of connections and number of houses connected to date, are as follows:

Streets, 25; number of connections, 252; number of buildings, 283.

Up to the present there have been constructed in the city of Pawtucket 5.07 miles of pipe sewers and 1.97 miles of brick sewers, a total of 7.04.

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OFFICE WORK.

Since the commencement of work under the town council of 1884 an accurate account has been kept, showing the amount of appropriation and the cost of each sewer.

All house drains laid have been inspected and a record kept of their position and depth.

The sewer plans are, as in our last report, in an unfinished condition, owing to there being no money available that it would have been safe to use to pay for finishing plans. There have been about six thousand feet of sewers constructed for which there will have to be surveys, plans estimates made from which to make the assessments.

It will be remembered that the appropriation asked for by the sewer commissioners a year ago, was cut down nearly $1200. In the amount asked there was no estimate for cleaning catch-basins, the care and cleaning of which having been placed in hands of the commissioner of highways. Your honorable body after the appropriation had been made, decided that the cost of cleaning and care of catch-basins should be paid from the sewer maintenance account, setting aside the sum of $800, thus reducing the amount available, $2000 below our estimate, which estimate in our opinion was low, leaving but $3200 for repairs and maintenance.

To keep within our appropriation and have money available in case of an emergency, we have had to cut everywhere possible, and have left things undone which should have been done. We have a large storehouse that should be painted and finished. We earnestly urge your honorable body to make the appropriation for office and maintenance large enough to allow your commissioners to carry on the the work of the department as it should be, and large enough to have the sewer plans completed and indexed.

For this purpose we would recommend that an appropriation be made of not less than $6000.

All of which is respectfully submitted.

ISAAC SHOVE,
FRED. W. EASTON,
WILLIAM P. MORONEY,
Board of Sewer Commissioners.

PAWTUCKET, R. I., December 1st, 1886.

SCITUATE.

4. Nothing done for the promotion of public health.

5. No water service for general use in this town.

8. The town council.

9. Health officer, W. J. Smith, M. D.

10. Gratuitous vaccination has been provided; about one-tenth of the population I should think has been vaccinated.

11. Undertakers have sent in their returns, but are not all prompt.

D. H. REMINGTON, *Town Clerk.*

SMITHFIELD.

4. No work for the promotion of public health.

5. No water service for general use in this town.

7. No new ordinances in abatement of nuisances have been adopted.

8. No board of health beside the town council.

9. W. A. Medbury, health officer.

10. No gratuitous vaccination provided during the year.

11. Undertakers have sent in their returns of death more promptly than heretofore.

O. A. TOBEY, *Town Clerk.*

WOONSOCKET.

4. No work for the promotion of public health, except the extension of water service.

5. The water commissioners estimate that the service reaches about one-third of the population, perhaps a little less.

6. No public sewers.

7. No new ordinances in abatement of nuisances. (See eighth annual report of the State Board of Health, pages 62, 63.)

8. No board of health beside the town council.

9. We have one health officer, Dr. A. M. Paine.

10. No gratuitous vaccination provided during the year.

A. E. GREENE, *Town Clerk.*

PROVIDENCE CITY.

1. No very fatal or unusual disease had very large prevalence in this city during 1886. Diphtheria had a larger prevalence than usual and the proportional mortality was larger.

3. No unusual disease among domestic animals.

4. See extracts from report of C. V. Chapin, Superintendent of Health on following pages.

5. See extracts from report of Samuel M. Gray, City Engineer, on following pages.

6. See same as No. 5.

7. See ordinance following.

8. The board of aldermen still act as the board of health.

9, Superintendent of health, Charles V. Chapin.

10. Gratuitous vaccination provided every year.

11. Undertakers are prompt in making returns of death.

EXTRACTS FROM THE INAUGURAL OF MAYOR G. F. ROBBINS.

WATER WORKS.

During 1886, four and nine-tenths miles of water mains (mostly 6-inch) were laid, making a total from the commencement of the works of one hundred ninety-four and two-tenths miles.

In the same period, fifteen fire hydrants, including one "post" hydrant, were set, making the whole number of fire hydrants to date twelve hundred and fifty-nine, eleven being "post" hydrants.

The largest amount of water consumed in any one day during the year was 8,979,000 gallons, being about a million more than in any previous day since water was introduced. The average daily consumption for the eleven months ending November 30 was 4,311,396 gallons, being not far from forty gallons daily to each inhabitant of the city. This is an increase of more than half a million gallons over the preceding year.

The total number of service stops opened to December 11 was 13,295, of which 12,594 were in actual use on that date, and 7,114 meters were in service.

SEWERS.

There have been built during the year 1.64 miles of pipe sewers and .52 miles of brick sewers, a total of 2.16 miles of sewers.

The total amount of sewers constructed to December 9, 1886, was 37.94 miles of pipe and 17.26 miles of brick sewers, making a total of 55.20 miles. Thirty-six catch basins have been constructed, making a total of 1,990 now in use. There are 2,818 sewer man-holes, 76 of which have been added to those built previous to this year.

The number of house or other private connections made with the sewers has been 4,569, of which 331 have been put in during the past year.

RULE RELATIVE TO REMOVAL OR RECONSTRUCTION OF PRIVY VAULTS, CESSPOOLS, SINKS, SINK DRAINS OR SINK SPOUTS.

[Adopted by the Board of Aldermen December 16, 1886.]

1. Whenever the board of aldermen shall find and determine any privy vault, cesspool, sink, sink drain, or sink spout to be prejudicial to the public health, and shall order the same to be removed or reconstructed, the owner of the premises upon which such privy vault, cesspool, sink, sink drain, or sink spout is situated, shall, upon notice of such action of the board of aldermen served upon such owner or upon the agent of the owner, or person in charge of such premises, and within the time specified in such notice, cause such privy vault, cesspool, sink, sink drain, or sink spout to be removed or reconstructed in such manner as the board of aldermen may order.

2. Every person violating the provisions of the foregoing section shall be fined not exceeding twenty dollars for each day on which such violation shall be persisted in.

EXTRACTS FROM THE REPORT OF THE SUPERINTENDENT OF HEALTH, C. V. CHAPIN, M. D.

"The sanitary history of this and other cities shows conclusively that care in the management of contagious diseases does result in the long run in a very marked decrease in the number of cases. The better classes in our cities are becoming remarkably free from the attacks of scarlet fever, diphtheria and even measles, and this, I believe, is attributed, not so much to better sanitary surroundings as it is to isolation, disinfection and care in avoiding contagion. If the same care were exercised by all, our deaths from contagious diseases would be lessened, I believe, one half. It is the business of the health department to secure the proper management of these diseases, and for this purpose I should advise:

1. A strict enforcement of the rules in regard to school attendance in cases of contagious disease.

2. A more effective medical inspection.

3. The placarding of houses where scarlet fever and diphtheria exist.

4. The forbidding of public funerals in cases of death from diseases.

5. The construction of a suitable steam disinfecting apparatus.

6. The construction of a hospital for these diseases. This latter is a very important matter, and another season should not be allowed to pass before the hospital is built. There is no hospital in the city which will receive such patients, and very often among the poorer classes, and even those in moderate circumstances, it is impossible to care for the sick at their own homes or to isolate them sufficiently to secure the public against contagion.

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VACCINATION.

The public vaccination of 1885 was so thorough that the number vaccinated at the city hall in 1886 was smaller than in any year since 1876. Only 630 persons presented themselves for vaccination. This brings the total number of persons vaccinated by the health department since 1856 up to 48,324.

Humanized virus was used, as it has been continuously, and of the same stock, since 1856. The number of transfers in 1886 was 16, making the total number since 1868, when an accurate record was begun, 241. Contrary to the usual custom, Dr. Leonard kept up the arm to arm vaccinations during the summer months, but the virus preserved in that way did not seem to retain its vigor so well as in the crusts which were preserved in closely stoppered bottles through July and August.

The number of certificates of vaccination issued by the department was 2,026 as compared to 2,725 in 1885. This makes the whole number of certificates issued since 1856, 42,288.

SWILL.

During the past year the swill has been collected as heretofore by parties acting under contract. For this service they received the sum of $12,000 per annum. As heretofore, they were not obliged to remove garbage from markets and stores, but the owners of these establishments were required to dispose of it at their own expense, and that, too, without creating any public nuisance or allowing it to accumulate for any length of time on their own premises.

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NIGHT-SOIL.

No change has been made in the manner of removal of night-soil. Air-tight box wagons are permitted from December 1 to April 1, but tubs are required the remainder of the year. The scavengers required, except in certain instances, on crowded thoroughfares, to do their work in the day time, as this has been found much more satisfactory than night work. The night-soil is almost all carried into the surrounding country and used for fertilizing purposes, though a small amount is deposited on farms and gardens on the outskirts of the city itself. This, however, is permitted in only a very few instances, and with the increase of population it must soon be stopped altogether. Some of the neighboring towns have prohibited the dumping of night-soil within their limits, and what is not permissible in the country should certainly not be allowed in the city. The present method of removing night soil is very unsatisfactory. The apparatus is entirely inadequate, and the parties engaged in the business slovenly, negligent, and, for the most part, irresponsible. The work should be done by the health department by means of teams owned by the city, and, as has been pointed out in other reports, the aggregate expense would probably not be as great as it is by the present defective method. And then the work would be done far better than it is now, and the city kept in a far cleanlier condition.

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NUISANCES.

During the year only one inspector has been employed in looking after nuisances, and the number recorded on the books in the office was 1,654 as against 2,421 of the previous year. While the inspection was not as complete as in 1885, when two inspectors were employed during the greater part of the summer, yet I feel that the comparatively small number of nuisances recorded indicates a better disposition on the part of our citizens towards sanitary matters. The condition of the vaults, cesspools, yards, sink-spouts, etc., is certainly much better than it was when systematic inspection of the city was begun three years ago. But unless inspection and prosecution also are kept up, the old order of things will speedily return. The great number of privy-vaults which exist in this city has been a constant menace to health, and has been the cause of numberless complaints on the part of the citizens. The rule recently adopted it is hoped will be the means of removing very many of them during the coming year.

(See Rule above.)

The nuisances abated during the year were as follows:

Privy-vaults full and offensive	962
Cesspools full and offensive	193
Defective vaults and cesspools	103
Uncovered vaults and cesspools	42
Cesspools and vaults leaking onto adjoining estates	32
No vault to privy	3
No cesspool on estate	25
Cesspools and vaults leaking into cellar	44
Defective waste and drain pipes	375
No traps	193
Filthy yards	320
Filthy water flowing into the street	34
Defective water closets	9
Filthy cellars	68

The number of orders issued in 1886 was 323. In 1885 it was 519.

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PAWTUXET WATER.

The efforts made to secure the removal of the dangerous sources of pollution of the Pawtuxet river have been so far successful, that of the 122 privies emptying into the stream only two remain, and of the other sources of pollution all have been removed except in the bleacheries and print-works, and the owners of the latter establishments have done much and are doing more to purify their effluent. But a single privy is enough to infect the entire water supply of the city and produce an epidemic of disease. The city has already spent several thousand dollars in removing these nuisances, and it is criminal folly to allow any to remain. If arbitration will not succeed, the law should be tried, and that, too, without further delay. While, as has been seen, much has been done to purify the Pawtuxet, yet continual vigilance is needed to keep it pure, and the board of public works should employ a competent person to examine the banks of the stream and see that the contracts made by the riparian owners with the city are carried out, and report any fresh instances of pollution; all of which should receive immediate attention. And this work should be done every year.

PAWTUXET WATER ANALYSES FOR 1886.

Two analyses were made each month.
The figures indicate parts in a million parts of water.

MONTHS.	Total Residue.	Mineral Matter.	Organic and Volatile Matter.	Common Salt.	Albuminoid Ammonia.	Ammonia.
January	49 54	32 36	17 18	5.65 5.95	.22 .26	.02 02
February	35 40	22 25	13 15	2.68 0.89	.20 .22	.02 .02
March	34 33	22 22	12 11	2.68 3.57	.22 .18	.02 .06
April	32 33	21 21	11 12	2.98 3.27	.18 .18	.02 .02
May	39 41	24 25	15 16	3.87 3.27	.30 .20	.02 .02
June	48 48	32 33	16 15	2.68 5.35	.18 .18	.10 .08
July	46 46	29 28	17 18	5.06 4.17	.24 .24	.06 .06
August	45 44	28 26	17 18	3.27 3.57	.22 .22	.14 .12
September	50 56	30 36	20 20	4.76 5.65	.24 .22	.12 .04
October	57 59	38 44	19 15	4.17 5.95	.22 .24	.04 .06
November	51 54	26 30	25 24	5.35 4.46	.24 .28	.04 .04
December	50 50	33 32	17 18	5.35 4.76	.22 .20	.02 .04

C. V. CHAPIN,
Supt. of Health

REPORT OF MEDICAL INSPECTOR, 1886.

The results of the year's work ending December 31, 1886, are as follows:

	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Total.
Whole number of premises visited	182	217	91	490
Extra cases in same premises	59	129	14	202
Total number of cases	241	346	105	692
Change of diagnosis	4	24	1	29
Number of actual cases	237	322	104	663

OCCUPATION.

Typhoid fever. The 104 cases represent 27 different occupations, 79 cases (75.9 per cent.) being entirely in-door work, 6 entirely out-door work, and 7 work requiring change from in-door to outside.

Of the occupations, 27 (25.9) were scholars, 25 were in and about the house, general house work, etc., 14 operatives in mills.

Diphtheria. Of the 322 cases, 89 (27.6 per cent.) are children in schools, the balance showing a diversity of occupations, mostly in.door.

Most of the balance have received the disease from children in their families who have been exposed to the disease in school.

Scarlet fever. Of the 237 cases, 68 (28.2 per cent.) are scholars, the majority of the balance being children too young to attend school, but receiving the contagion from brothers and sisters already attending.

It will be seen by these figures that the school children furnish a little over one-fourth of the number of cases of all three diseases. It will, therefore, be readily seen how important it is that a perfect control upon the school attendance be had, especially in those two diseases, scarlatina and diphtheria, in which the disease is communicated by the presence of the diseased person.

There were excluded from attendance upon the schools, public, parochial and private:

Individuals having scarlet fever	69
" " diphtheria	68
Scholars in same house and in contact with these diseases	264
Total	401

All of these are supposed to receive a permit from the department before being allowed again to enter school. Thirty permits only have been issued by this department; a small number of the cases are deceased.

Permits are frequently issued by the physician in attendance, who is desirous of pleasing the family, or having individual ideas in regard to contagion, sees fit to try experiments, the results of which are daily shown to the department by the appearance of a fresh batch of cases.

In many instances the statements of the parents to the effect that the child is well is sufficient for the teacher to allow re-admission to school.

A second case appearing in a family, no second notice is given to the teacher unless permits have already been issued for the first case, and where the disease lingers in a family for a month or two, it can readily be seen how the teacher may be misled by the statements of parents wishing to place as many as possible of a numerous family under other care while sickness is present in the household.

EXPOSURE AND CONTAGION.

In scarlet fever there were 50 cases of authenticated exposure, being found mostly where other children of the same family have the disease; the time of exposure varying from two days to four weeks, and being most on the fifth and seventh day.

In diphtheria there were 98 cases of authenticated exposure, varying from one day to ten weeks.

As to location of disease in the city, there has seemed to be a predilection for the vicinity of the lower part of "Federal hill," Bradford street and immediate vicinity.

Two groups of cases or local epidemics are worth noticing, one starting in the vicinity of Diamond street, and the second in Claverick street, and both producing by authenticated contact a large number of cases.

SANITARY CONDITIONS.

Yards The marked improvement in cleanliness of yards was striking, receptacles of swill being provided and space about the "tubs" being well scraped up. In only 10 instances was swill found lying upon the ground, against 23 last year.

In 20, swill had been thrown into vaults, making a total of 33 where organic matter was left to decay on the premises.

Vaults. Vaults were found to be full in 31 instances. As usual, the vault of a neighbor far removed from the house to which it belongs is crowded as near as possible to the dividing line and up under the windows of those affected with disease.

Wooden spouts. This common inefficient and uneconomical means of disposing of sink water was found in 117 instances; 58 of these were leaking at time of inspection, and there is no reason why they should not all leak, for wood and nails cannot withstand the constant expansion of freezing water, nor the heat of the summer's sun.

Traps. On 237 premises, houses were found having no traps upon the waste pipes.

In 25 other instances no traps had been placed in the cellar, although they had been affixed to sinks on the floors above. It is not necessary to explain how this one ventilator for the cesspool succeeds in contaminating the atmosphere of the whole house.

The illustrated circular on plumbing distributed this year by the department has served to explain to tenants the need of such appliances, and the sooner the tenant understands the danger that he and his family are exposed to, the sooner will the landlord believe that the house is not tenantable from the lack of such fixtures.

Water closets. These appliances were found in 81 cases, the majority (57) being of the dangerous and condemned Bartholomew pattern or pan closet; 13 were of the improved wash-out pattern, and 11 of the simple hopper closet.

Cesspools. Three hundred and fifty-eight premises were obliged to depend upon cesspools for disposing of the waste material from house, many of them being on sewered streets, some adjacent to wells used as the only source of drinking water. Most cesspools have their coverings placed three or four feet underground, and an unknown number have never been cleaned out, although they may have been built twenty years.

In nine cases, no sewers and no cesspools being provided, the wastes were thrown on the ground or allowed to flow from spouts on to the surface, regardless of the wells and cesspools below the surface.

Drains. Imperfect connection of waste pipes, or of waste pipes and drain were found in 55 premises; in many cases the cement serving to close the connection has so shrunken and cracked, or been imperfectly mixed, that it readily falls away from the opening soon after the work is done, and being usually in some dark corner is overlooked, and the safety from a plumbing system with traps, etc., that is supposed to be perfect, is thus destroyed, the gases finding their way throughout the cellar and upwards into the living rooms.

Leakages at *sinks* occurred in 16 cases, due to the imperfect connection of waste pipe and sink, or to punctures in waste pipe caused by blows received from kettles and pans which are crowded into the dark, unventilated, ill-smelling space beneath the sink.

This space is always a catch-all for dirty rags, grease, etc., and with a leak at this point it becomes a serious matter. If householders would not enclose these spaces they would be kept cleaner, would be better aired, and leaks would be discovered at once and remedied, the waste-pipe being protected by a slight partition against blows from cooking utensils.

Heat.

Steam heat was supplied in	3 premises.
Furnace heat in	28 "
Cold air supply to furnace being taken from cellar	3

Refrigerator wastes. In three cases only refrigerator waste-pipes were so arranged that contamination of food by "sewer gas" or other foul air was made possible.

Water Supply.

Well water only supply	8
Well and cistern	29
Cistern only	7
Well and Pawtuxet	16
Cistern and Pawtuxet	3
Total	63

In all other cases, 600, Pawtuxet water was the only supply.

Milk supply. The milk supply showed no indication of concentration of disease upon any one dealer, the number of sources being over 100.

The number of cases finding origin from attendance upon funerals, or in assisting in arrangement of the remains where the deceased has had contagious disease, were unusually numerous this year. This form of sympathy, reacting as it does upon the family which has the original case, is of doubtful propriety when whole families are, as a result, stricken down, some with death, and they in their turn communicating it to others.

Were it not for the co-operation of the schools and police in reporting cases, and the death returns, many cases would never be known, while at the same time the Medical Inspector finds many cases in searching out those known, which have not been reported to the department in any way; also many cases subsequent to the first which are not reported since they occur in the same family.

Through the apathy and from the opposition of certain physicians there were 80 cases of unreported contagious diseases.

G. T. SWARTS, M D.,
Medical Inspector.

EXTRACTS FROM THE REPORT OF THE CITY ENGINEER, S. M. GRAY, C. E.

Following is a statement of the length of each size of water pipe in the ground January 1, 1887, considered as mains :

SIRE OF PIPE.	Length in feet.	Length in miles.
36 inch	10.084.	1.9098
30 "	59,637.	11.2949
24 "	23,942.	4.5345
20 "	6,854.8	1.2983
16 "	31,574.	5.9799
12 "	57,423.9	10.8757
10 "	14,758.1	2.7951
8 "	147,191.15	27.8771
6 "	674,068 37	127.6645
*4 "	3,719.3	.7044
Totals	1,029,252.62	194.9342

* At Pipe Yard, Roger Williams Park and North Burial Ground.

Included in the above table are the following approximate lengths of pipe which are laid in adjoining towns:

CRANSTON.		JOHNSTON.	
INCH.	MILES.	INCH.	MILES.
36	1.91	30	.01
30	4.51	12	.05
24	.13	8	1.90
12	1.51	6	4.69
	2.11		
	3.40		

Length of service pipes laid in 1886, 8,726.5 feet.

Total number of services in use December 31, 1886, 12,552. Total number of dwellings about 16,350.

The number of drinking troughs now in use is 27 of the boiler pattern, three stone troughs, and seven of the Jenks pattern, including one at Pettaconset pumping station, making the total number 37.

The number of drinking fountains now in use is 14 attached to lamp posts, and one attached to a drinking trough, making the total number 15.

WATER WORKS.

Water pipes have been laid during 1886 as follows:

	SIZE OF PIPES		
	6-inch.	8-inch.	12-inch.
Length, feet	19,912	5,593	570

Total feet, 26,075.

The annual and the average daily consumption of water, including waste and leakage, during the year 1886, is shown by the following summary:

Annual consumption	1,760,075,518
Average monthly consumption	146,672,877
Average daily consumption	4,822,125

The amount of water consumed, as shown above, includes the supplying of about 14 miles of distribution pipes located in adjoining towns, as well as supplying the greater part of the State Institutions at Cranston.

Sizes and length of sewers constructed during the year:

	PIPE SEWERS, SIZE		CIRCUIT OR BRICK SEWERS	
	12-inch.	15-inch.	18-inch.	48-inch.
Length, feet	8,844.88	841.35	355.70	1,553.47

Totals, 11,595.4.

Length, miles, 2.19.

CHARLESTOWN.

4. No work for the promotion of public health contemplated by the authorities during the year.

5. No introduction of water.

6. No sewerage.

7. No new ordinances in abatement of nuisances.

8. No legal board of health beside town council.

9. No health officer appointed.

10. Gratuitous vaccination has been provided by town council, which was performed by H. R. Gardiner, M. D., at the district school house; 30 out of 1,000 vaccinated.

11. Undertakers have quite promptly sent in returns of death.

G. C. CROSS, *Town Clerk.*

EXETER.

4. No particular work for the promotion of public health has been contemplated.

8. The legal board of health, the town council.

9. The town council act as health officers.

10. Gratuitous vaccination has not been provided during the past year.

11. Most of the undertakers send returns, but frequently, in a country town like this, other persons not undertakers have charge of funerals and do not make returns. Only about one-half the deaths are returned at the time. Returns are obtained when school census is taken.

N. B. LEWIS, *Town Clerk.*

HOPKINTON.

4. No work for the promotion of public health has been contemplated by the town authorities during the past year.

5. No public water service.

6. No sewerage.

7. No new ordinances in abatement of nuisances.

8. No legal board of health beside the town council.

9. Town council, C. C. Lewis, F. Steere, I. Gates, N. A. Wilcox, J. T. Wilbur.

10. No; but in latter part of year 1885, 386 persons were vaccinated by town authority; intended to vaccinate all who never had been or that needed.

11. Undertakers have quite promptly sent in their returns of death.

NORTH KINGSTOWN.

4. No action for the promotion of public health.

5. No water service.

6. No public sewerage.

7. Have made new ordinances, now in printer's hands; will forward you a copy when received.

8. No legal board of health except town council.

9. S. O. Myers, M. D., health officer.

10. Gratuitous vaccination has not been provided since 1885; 400 were vaccinated gratuitously that year.

11. No; we have no appointed undertakers. Mr. George T. Cranston and John W. Page are in that business, but they make no returns.

C. T. CROMBE, *Town Clerk.*

SOUTH KINGSTOWN.

4. No new work for the promotion of public health has been contemplated or completed by the town authorities during the year.

5. Propositions to introduce water works have been made.

6. No public sewerage.

7. Committee on revision of ordinances are now at work.

8. The town council the legal board of health.

9. John R. Wilcox, health officer.

10. Gratuitous vaccination has not been provided in this town during the past year.

11. Undertakers have quite promptly sent in their returns of death.

J. G. PERRY, *Town Clerk.*

RICHMOND.

4. Nothing new has been done for the promotion of public health.

5. No introduction of water service for general use.

8. No legal board of health beside the town council.

9. Health officer, A. H. Eccleston, M. D., P. O address Richmond Switch.

10. There has been no gratuitous vaccination provided in this town during the past year.

11. There is not any regular undertaker in this town; Mr. S. N. Richmond of Hopkinton officiates in this town.

H. P. CLARKE, *Town Clerk.*

WESTERLY.

3. No largely fatal disease occurred among domestic animals in this town during the year.

4. No new work for the promotion of public health.

5. Water introduced to private parties in the village of Westerly; completed November, 1886; eight or ten had water on January 1, 1887.

6. No public sewerage.

7. See ordinance following this report, also eighth annual of the State Board of Health, page 75.

9. The health officers of this town are H. M. Rose, M. D., superintendent of health, and Benjamin York.

10. Gratuitous vaccination has been provided during the past year only to a partial extent.

W. Hoxsey, *Town Clerk.*

ORDINANCE IN RELATION TO CONTAGIOUS DISEASES.

Section 1. Every physician having knowledge of the existence of any case of contagious, infectious, or epidemic disease within the town of Westerly, shall immediately make a report thereof, in writing, to the Superintendent of Health of said town, with such particulars as the said superintendent may indicate, on blanks furnished for that purpose.

Sec. 2. The diseases referred to in the preceding section shall, among others, include especially small pox, diphtheria, typhoid fever, typhus fever, scarlet fever or scarlatina, cerebro-spinal meningitis or spotted fever, measles, and whooping cough.

Sec. 3. Any physician who shall fail to comply with the preceding regulation shall be fined not more than twenty dollars for each day of such neglect after having knowledge thereof as aforesaid.

The Superintendent of Health issued the following notice:

To Physicians in Westerly:

Enclosed I send a copy of an ordinance adopted by the town council of Westerly.

You will perceive that these regulations provide for obtaining information of the existence of cases of contagious, infectious, or epidemic sickness. The want of this information has been long felt, and its importance must be obvious to all. It supplies to the profession most valuable knowledge in regard to the ratio of deaths to cases of sickness, and gives the health officer an opportunity to take measures to prevent the spread of disease before the death of the patient.

Physicians are requested to report *all cases of contagious, infectious, or epidemic sickness existing at this date*, and hereafter all cases as soon as known. In addition to the simple report of the case, physicians are requested to furnish any information in regard to the supposed causes of the disease, any evidence of contagion, or any causes of sickness about the premises that may be removed. Reports of every case are required, *even of the slightest*, as these are necessary for a correct record and statistics.

Printed blanks will be furnished to all physicians, and envelopes directed to me, so as to make as little trouble as possible in complying with the ordinance.

Please write the names plainly, give the exact age in years and months, give the residence definitely, so that it can be easily found, and give the exact date when the patient was taken sick.

These reports may be *left at my office in the Briggs Building, or be sent through the postoffice.* Additional blanks will be furnished on application.

In addition to the diseases named in the ordinance, physicians are invited to report cases of any other contagious, infectious, or epidemic disease, including all usually called zymotic diseases.

Truly yours,

HENRY W. ROSE,
Supt. of Health.

METEOROLOGY.

The influences of the conditions of the atmosphere upon disease are recognized and acknowledged by all pathologists, and the following tables are therefore introduced for the purpose of comparing the large prevalence of certain diseases at different periods of the year, with the temperature, the barometric pressure, the relative humidity, prevailing direction of the wind and other conditions of the atmosphere, and also the amount of rainfall during each month of the year. The said diseases may be found in the reports upon the registration of deaths by months, Table VIII, Part II.

The first table is compiled from the monthly reports of the City Engineer of Providence, and shows the mean, maximum and minimum temperatures of the different months, and the extremes and average daily ranges of the same, the rainfall and prevailing direction of the wind.

The second table will give a more comprehensive monthly summary of observations during 1886, including a larger number of atmospheric conditions for each month, and also yearly summaries for each of the four preceding years.

It is condensed from the annual summary of monthly observations at Hope Reservoir and the City Hall.

The meteorological observations taken on Block Island, are furnished by the courtesy of the officers of the Signal Office, War Department, Washington, D. C.

Temperature, Rainfall and prevailing direction of the wind, for each month during the year 1886, at Providence, R. I.

1886.	TEMPERATURE.							Total amount of Rain or Melted Snow in inches.	Prevailing Direction of the Wind.
	Monthly Mean.	Monthly Maximum.	Monthly Minimum.	Monthly Range.	Greatest Daily Range.	Least Daily Range.	Average Daily Range.		
January...	26.4	52.0	–5.5	57.5	26.5	2.5	12.4	7.10	N. & N. W.
February..	27.0	55.5	–5.	60.5	31.	6.5	15.	11.31	N. W.
March. ...	34.1	63.	3.5	59.5	22.	3.	13.7	3.28	N. W.
April......	49.2	79.	30.	49.	30.5	6.	19.2	2.87	N., N. E. & S.
May.......	57.2	86.5	40.	46.5	26.5	8.5	19.1	3.86	N. E. & S.
June......	64.7	85.	48.5	36.5	31.5	8.	18.	1.31	S. & W.
July......	72.3	95.5	55.	40.5	31.5	5.	19.7	1.99	S. & S. W. Var.
August....	68.6	87.	49.	38.	28.5	9.5	18.7	4.22	S. & Variable.
September.	63.5	83.	42.5	40.5	24.5	6.5	16.6	2.77	N. & N. W.
October....	51.5	77.5	28.	49.5	30.	4.5	17.6	3.53	N., S. W. & Vr.
November.	42.7	63.5	25.	38.5	30.	7.5	15.7	3.86	W. & N. W.
December..	27.8	53.5	9.	44.5	25.	5.	13.8	5 92	N. & N. W.

Mean temperature for the year 1886, was 48.8 Fah. Total amount of rain and melted snow, 52.02.

NOTE.—The maximum and minimum thermometers were not read on the Sabbath; therefore the daily ranges were computed, considering the reading from Saturday to Monday as one.

Statement showing the air pressure, reduced to sea-level and standard gravity, the temperature, precipitation, and the prevailing direction of the wind, for each month of the year 1886, at Block Island, R. I.

Month. 1886.	Pressure.			Temperature.							Precipitation, inches.	Prevailing Direction of Wind.
								Daily Range.				
	Mean.	Highest.	Lowest.	Mean.	Maximum.	Minimum.	Absolute Range.	Mean.	Greatest	Least.		
January	30.000	30.771	28.807	30.2	52.1	0.9	51.2	10.8	22.6	2.1	7.04	N. E.
February	29.995	30.571	29.105	28.4	52.0	-1.0	53.0	13.6	30.3	3.0	8.89	S. W.
March	29.875	30.513	29.262	34.2	56.0	5.8	50.2	12.1	19.3	4.2	5.42	N. and N. W.
April	30.117	30.633	29.501	45.2	69.7	31.9	37.8	11.5	25.0	4.1	3.26	N. E.
May	29.899	30.359	29.491	53.5	73.2	41.7	31.5	11.1	19.9	4.1	4.14	S. W.
June	29.969	30.301	29.484	61.3	74.1	47.6	26.5	10.9	19.3	3.2	2.15	S. W.
July	29.934	30.234	29.699	68.7	80.3	57.7	22.6	11.5	19.5	4.6	1.68	S. W.
August	29.959	30.353	29.511	67.2	80.0	54.5	25.5	10.9	17.3	5.3	2.47	S. W.
September	30.113	30.432	29.677	64.8	77.7	50.2	27.5	10.1	15.7	5.2	2.90	S. W.
October	30.144	30.545	29.747	54.8	71.0	35.1	35.9	10.8	20.5	3.9	4.71	N. E.
November	29.977	30.425	29.376	46.6	63.5	32.5	31.0	12.5	24.9	3.7	5.16	S. W.
December	30.077	30.583	29.388	34.0	54.3	15.5	38.8	12.1	28.0	4.4	6.70	N. W.

Mean temperature, 49.1. Total precipitation, 54.52 inches.

SIGNAL OFFICE, WAR DEPARTMENT, WASHINGTON CITY.

COMPILED FROM THE SUMMARY OF METEOROLOGICAL OBSERVATIONS, AT HOPE RESERVOIR AND CITY HALL, FOR THE YEAR 1886.

MONTHS.	BAROMETER. Reduced to Sea Level, and to 32°.				THERMOMETERS.				Relative Humidity.	WIND.										WEATHER.						RAIN AND SNOW.	
										Prevailing Direction. No. of Days it was.										Atmosphere. No. of days it was.							
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.	Mean.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Variable.	Mean Velocity.	Clear.	Fair.	Variable.	Rain or Snow.	All others.	Mean Amount of Cloud.	Amount of Rain or Melted Snow in inches.	Depth of Snow in inches.
January........	30.01	30.80	28.69	2.11	26.4	52.	—5.5	57.5	76	10	1	0	1	1	0	2	10	6	10	5	7	1	17	1	5.6	7.10†	20.75
February..........	29.97	30.66	28.99	1.67	27.0	55.5	—5.	60.5	72	2	2	0	1	5	4	4	8	2	11	5	7	0	14	2	5.0	11.31†	8.00
March.............	29.88	30.56	29.23	1.33	34.1	63.	3.5	59.5	71	3	2	1	1	5	1	2	11	5	10	2	14	0	15	0	5.7	3.28†	3.75
April...............	30.13	30.60	29.49	1.11	49.2	79.	30.	49.	71	4	5	2	0	5	2	2	1	9	8	3	15	0	11	1	5.2	2.87†	1.00
May................	29.91	30.34	29.46	.88	57.2	86.5	40.	46.5	71	3	5	2	2	4	3	2	4	6	9	3	10	0	18	0	5.4	3.86	......
June................	29.98	30.29	29.46	.83	64.7	85.	48.5	36.5	72	1	2	4	0	7	1	4	5	6	7	3	16	0	11	0	5.3	1.31	......
July................	29.94	30.23	29.68	.55	72.3	95.5	55.	40.5	71	2	1	1	0	7	5	5	1	9	6	0	14	2	12	3	4.6	1.99	......
August.............	29.97	30.38	29.49	.89	68.6	87.	49.	38.	75	4	1	1	0	11	2	2	4	6	7	1	16	1	11	2	4.1	4.22	......
September.........	30.13	30.47	29.67	.80	63 5	83.	42.5	40.5	78	6	3	0	0	5	3	0	8	5	7	1	15	3	11	0	5.1	2.77	......
October............	30.15	30.58	29.68	.90	51.5	77.5	28.	49.5	77	6	4	0	0	1	6	1	5	8	7	5	10	6	9	1	4.3	3.53	......
November.........	29.97	30.44	29.23	1.21	42.7	63.5	25.	38.5	74	1	1	0	2	4	2	9	6	5	8	3	12	2	13	0	4.5	3.86†	*
December..........	30.07	30.59	29.32	1.27	27.8	53.5	9.	44.5	75	9	0	1	0	1	1	6	9	7	9	3	7	3	18	0	5.6	5.92†	21.00
Means for the year.	30.01	.....	.....	1.13	48.8	......	......	46.8	74	..	..	..	..	..	..	..	..	..	8	....	....	....	....	....	5.0	....	......
Totals for the year.	......	......	......	......	......	......	......	......	....	51	27	12	7	56	30	39	69	74	....	34	143	18	160	10	...	52.02	51.50
Extremes..............	30.80	28.69	2.11	......	95.5	—5.5	101.0	....	..	..	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	......	

Yearly Summary for 1885.

Means for the year.	29.98	......	......	1.09	48.7	......	......	46.6	71	..	..	..	..	..	..	..	..	..	9	....	....	....	....	....	4.6	....	......
Totals for the year.	......	......	......	......	......	......	......	......	....	46	21	8	14	56	43	42	74	61	....	45	157	17	142	4	....	43.57	27.25
Extremes	......	30.82	28.99	1.83	......	83.5	—1.	94.5	....	..	..	..	..	..	..	..	..	..	....	....	....	....	....	...	....	....	......

Yearly Summary for 1884.

Means for the year.	30.01	......	......	1.05	49.5	......	......	49.2	76	..	..	..	..	..	..	..	.	..	9	....	...	....	....	....	5.3	....	......
Totals for the year.	......	......	......	......	......	......	......	......	....	57	22	8	14	42	60	27	63	73	....	36	127	26	166	11	....	57.50	14.50
Extremes..........	......	30.79	28.93	1.86	......	94.	—10.	104.	....	..	..	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	......

Yearly Summary for 1883.

																			Mean Force.								
Means for the year.	30.05	......	.. ...	1.08	48.2	......	......	45.5	72	..	..	..	..	..	..	..	..	..	2.2	....	....	....	...	....	5.1	.... ..	......
Totals for the year.	......	......	......	......	......	......	......	.....	....	43	31	7	11	44	51	35	70	73	....	45	136	17	156	11	....	45.71	73.00
Extremes..........	......	30.77	28.88	1.89	......	93.	—9.5	102.5	....	..	..	..	..	..	..	..	..	..	....	...	....	....	....	....	....	... .	.....

Yearly Summary for 1882.

Means for the year.	30.03	......	......	1.03	49.2	......	.. ..	46.	72	..	..	..	..	..	..	..	..	..	2.2	....	....	....	....	....	5.3	....	......
Totals for the year	......	......	......	......	......	......	......	......	....	54	26	2	16	16	39	40	82	60	...	44	148	31	136	6	....	51.84	71.00
Extremes..........	......	30.79	29.22	1.57	......	95.	—11.	106.	....	..	..	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	......

The force of the wind and the amount of cloud expressed approximately in figures from 0 to 10. † Too small to be measured. * Snow and rain.

CATTLE COMMISSION.

The Secretary can again report for another year the general good health of the domestic animals of the State. No contagious or infectious disease of such animals had widely spread, or large prevalence, during 1886. The swine plague prevailed in two localities, where in single herds a considerable number were kept together. The proportional mortality in both was quite large. Tuberculosis in milch cows has been reported in an unusual number of cases and seems to be acquiring a larger prevalence. Contagious pleuro-pneumonia has not invaded this State, but with its extended prevalence in the West, it may at any time find its way into Rhode Island. Glanders and farcy continue in about the same number of cases as reported during the last five or six years. Further remarks in relation to the diseases named will be found in the pages following. The duties of the cattle commission have required attention on about one-third of the whole number of days in the year.

CONTAGIOUS PLEURO-PNEUMONIA.

Although no cases of contagious pleuro-pneumonia have occurred in this State, so that the disease has become a matter of home concern like glanders, nevertheless, because of its existence for a considerable number of years in the vicinity of New York city and along the Atlantic seaboard and for variable distances therefrom inland, and because of its great virulence and the danger to which the cattle industries of the country were exposed by its presence, even in limited localities, it has been given more or less consideration in the previous reports of the Board.

At this time, however, it has gained a foothold in so many localities west of the Alleghanies and even west of the Mississippi, and has prevailed to so large an extent in the great centers of cattle distribution to the eastward, that the present and future of the great industry of cattle growing and exchange, is, to say the least, alarming. Alarming, not only to the cattle growers and cattle buyers of the West, but to the cattle owners of the New England states, by its introduction to the herds of milk producers from the continuous stream of such stock in multitudes innumerable flowing into and through such centers of purchase and distribution as Brighton, Mass., and largely from the West by different lines of transportation. Twenty-six hundred and fifty neat cattle, mostly milch cows, were killed by order or under the supervision of the Inspectors of the Government Bureau of Animal Industry in the city and suburbs of Chicago, Ill., during the last months of 1886, because of exposure to, or suspicion of having, the contagious pleuro-pneumonia.

By post mortem examination in more than thirteen hundred of the animals, the disease was found to exist, and consequently the whole would have been affected sooner or later. The disease exists in considerable numbers in other sections of Illinois, and in other western States.

With the common greed of human nature and the disposition of many cattle owners to realize as soon as possible, the nearly full value of animals which they suspect have contracted some fatal disease, it seems hardly possible that the herds in the New England States can all, wholly escape infection. And if infection occurs without immediate development and among a number of animals in transit, and these find purchasers in various different localities, outbreaks of the disease may spring up at many different points and require a great deal of labor and expense in the extermination of the same.

The laws of Rhode Island in relation to infectious diseases among cattle are such, that any outbreak of the kind alluded to, may be confined to the herd or locality in which such outbreaks occur if timely notice is given the State Board of Health of such occurrence. The great danger of the wide spread prevalence of contagious pleuro-pneumonia arises from the fact that cattle exposed to the contagion and contracting the disease do not develop the symptoms in any regular period of time, the period of incubation varying from two or three weeks to three months. And the fact that the hair of healthy cattle that come in contact with cattle already affected with contagious pleuro-pneumonia, may receive the infectious matter of the disease from the breath or from the tongue, and so carry the infection and communicate the disease from the hair, possibly even before the animals carrying the disease in the hair are themselves affected. It will be seen that from the length of time before the disease is manifested, and from the possibility of its cause being carried outside of the body as well as within, the opportunities for conveying the infection are largely multiplied, giving time for possible contact with a great number of animals, through transportation, sale and exchange.

Then again it is believed by many eminent veterinarians that such animals as recover apparently, may at some subsequent date be the cause of other outbreaks, because the solidified portions of the lungs, left by the disease, contain in some cases, enveloped in a kind of cyst, the infecting particles of the disease, which by ulceration may be set free from the cyst and expelled by coughing and thereby in turn become the cause of a new infection and the further propagation of the malady.

There is at this time no question for the consideration of the whole American people, of such universal importance as that of "How shall the great cattle plague be stayed," or rather, "How may it be completely extirpated from American soil."

The act of Congress passed in May 1884, establishing a Bureau of Animal Industry, under the control of the Commissioner of Agriculture, extracts from which have been given in previous reports of this Board, has been of incalculable value already to the cattle interests of the United States. In furtherance of the same objects another Bill for a more stringent and effective Act, to be introduced into the December session of the present Congress, was framed during the last months of 1886, under the auspices of the united interests of the cattle breeders and cattle buyers of the whole country.

The Bill is entitled "An Act to extirpate contagious pleuro-pneumonia, foot and mouth disease and rinderpest among cattle, and to facilitate the exportation of cattle and the products of live stock and for other purposes."

The Bill is too long to be introduced into these pages, but as it conforms in spirit and intent with the Act of 1884, making the means of accomplishing the desired object more imperative and effectual, it is not necessary that its entire scope and mode of enforcement should be given here.

SWINE PLAGUE.

Hog Cholera, so called, has been reported in fewer instances during 1886, than in some previous years, and with one exception the number affected was not large.

The name hog cholera seems to be a misnomer, inasmuch as the intestinal discharges have more of diarrhœal than of choleraic characteristics, and from more extended and precise pathological investigations it becomes seemingly quite evident that the disease is essentially a condition of blood poisoning, and the free alvine discharges the result of diminished vitality, relaxation of tissue and greater freedom of secretion and exudation. Among the swine dead from hog cholera, or more properly called swine plague, seen in Rhode Island, but few comparatively had any considerable amount of inflammation of the intestines, while all had more or less of inflammation of the lungs. There were in all cases more or less inflammation or congestion of the lymph glands and ecchymosis or discoloration of the skin.

It is certainly an infectious disease, and is doubtless caused by a parasite, a micro-organism, that gaining entrance into the fluids of the body of the swine, propagate and multiply to an enormous extent, changing and destroying the natural and healthy constituents of the blood and other fluids, to the point of incompatibility with the continuance of life. It will be found difficult in all probability, to keep for any very extended period of time, a large number of swine in limited and warm enclosures, with high feeding, and especially if not kept scrupulously clean, without at the same time promoting the development of the bacillus or bacterium that causes the swine plague.

There is a probability, judging from the results of innumerable experiments by some of the ablest and most expert biologists in the world, that at no distant day the means of preventing hog cholera or swine plague, (claimed even now,) will be positively discovered and universally acknowledged and practically employed.

If such a result be accomplished it will be a means of adding greatly to the security of meat production in the United States, the losses occasioned by the swine plague in 1886, having been estimated by the Department of Agriculture to have been nearly fifteen millions of dollars.

TUBERCULOSIS.

Previous to the summer of 1886, the attention of the Secretary of the Board had been only infrequently called to the existence of cases of tuberculosis among the neat cattle of the State. And such occurrences had almost invariably been of single individual cases, in herds of considerable numbers, with no repetition of the same disease within the same year in the same herd, and with one exception, no subsequent case in any subsequent year in the same herd. During the summer and fall of 1886 more cases than usual were reported having the characteristic symptoms of tuberculosis, and upon death and post mortem examination, showing the usual tubercular deposits.

The reports from Maine, New York, New Jersey, Ohio and other sections of the country, giving accounts of the entire destruction of whole herds of bovines, mostly milch cows, because of the evident contamination in a greater or less degree of the whole stock, by the infection of tuberculosis, raised the question, "are there such herds in Rhode Island?" No evidence was presented within the year to warrant such a belief, but the somewhat increased number of single animals affected was a source of suspicion and solicitude.

The recent investigations of the leading veterinary pathologists of Europe and America, in the direction of ascertaining the nature or essential characteristics and modes of propagation of tuberculosis, seem to establish the theory of its infectiousness, and that it is not only transmitted by heredity, but directly from one animal to another; possibly by communication through the atmosphere, in the most advanced stages of the disease, evidently by inoculation and by introduction within the body of the infective matter in the food and drink. The fact that single animals in herds have the disease, and remain in daily contact with the healthy animals of the same herds for weeks and months, and finally die while still among them, or are killed because death is imminent, and the remaining animals continue in apparently the best health for months and years, would seem to show that the evidence of the communication of the disease through the medium of the air and by the means of the infective matter of the disease being held in suspension and floating in the atmosphere, was at the best not quite conclusive.

The opinion is now almost universally held, that the disease is caused directly or indirectly by an exceedingly minute living organism, a bacillus or microbe so called, capable of a more or less rapid reproduction or multiplication of its kind when introduced into the body of the animal and finding its way into the blood and other fluids. Whether the bacillus having poisonous properties, or by irritation from numbers, is itself directly the cause of the disease, or whether, by its chemical or vital action upon the fluids of the body—by which it is nourished and in which it is multiplied—it converts those fluids, or some constituents of those fluids, into a poisonous product by which the disease is caused, is not now definitely known.

There seems to be a certain power of vital resistance, on the part of some bovine animals, to the morbid effects of the bacilli of tuberculosis, either in arrest or retardation of their development, or greater or less immunity from the effects of their poisonous products, if such there are, by which the disease is rendered less virulent or less active, and by which the causes are held latent and dormant for indefinite periods of time or are resisted and repulsed entirely.

By heredity there is a peculiar liability or predisposition to the disease, not only more or less immediately from the reception within the body of active bacilli from a diseased animal. but also to the development of latent germs, by the weakening of the normal resisting forces, enfeebled by unsanitary surroundings, improper feeding or a too great demand upon the physical energies of the animal.

The surroundings of neat cattle appear to have a great influence upon the original development, and also upon the rapidity of progress, of tuberculosis. They facilitate or retard the multiplication of the bacilli within the body in some measure, according to their effect upon the general health of the animal.

Surroundings may also if unsanitary, promote the germination of the spores or seeds of the tuberculous bacilli outside the body, and also their growth and reproduction, and so increase the sources of infection, and facilitate the invasion and progress of the disease among the uninfected animals by means of decomposing material intervening between animal and animal.

Observations seem to indicate, that the finer the strain of blood of the neat cattle in this State, the greater the susceptibility to the invasion of tuberculosis. Possibly and even probably, causes other than the finer quality of the blooded stock have large, if not predominant influence in the causation of such susceptibility.

Such animals have generally been kept together in larger numbers, have been housed in warmer quarters, with less square feet of floor space and less number of cubic feet of air space per head, have had less range through the day, have been more highly fed and otherwise pampered, the cows have been drawn upon more heavily for milk, and both sexes have been more severely taxed by the demand for reproduction.

It is natural for bovine animals to congregate in herds, but the gregarious instinct does not cause continuance in limited quarters and limited air space, and it is also a question to what extent oil meal, brewer's grains and ensilage may constitute the diet of neat cattle within the limits of the best health.

GLANDERS.

Forty-six horses were reported or brought to the attention of the Secretary during 1886, as having or suspected of having, glanders or farcy. Of the forty-six, there were twenty-two in which the disease was found existing at the time of first examination or was confirmed later by isolation.

Of the twenty-two found glandered, twenty were killed, and two died before preparations for their burial were completed. The localities where they were found or owned, and number in each locality were as follows: Providence, twelve; Barrington, two; Johnston, two; Pawtucket, Lincoln, Cumberland, Johnston, Coventry and Scituate, one each.

Attention was given to the examination or investigation of glanders and farcy on one hundred and four days during the year.

VETERINARIANS.

The increased frequency of the occurrence of contagious and epidemic diseases among domestic animals is directing the attention of the thoughtful public, and especially such as have considerable property interests in cattle, horses and swine, to the importance of an educated veterinary profession as a distinct calling. There are in the State a small number of practitioners of veterinary medicine and surgery who have, by long experience, close observation and natural good sense, acquired a large amount of available knowledge of the diseases of domestic animals, and upon whose judgment and skill their patrons may confidently rely. Such knowledge is, however, obtained by slow degrees and through many errors. Years ago a practical knowledge of the diseases of animals was only acquired in this country by association with a veteran practitioner of veterinary medicine with a few books, or by the rough and uncertain road of practical experience.

At this time the circumstances are different, excellent schools of veterinary medicine are now sufficiently numerous, some of which are under the auspices of the most prominent colleges and universities in America. The anatomy, physiology and pathology of different animals are well taught, the appearance and symptoms of disease are shown by actual observation and inspection of sick animals in the veterinary hospitals connected with the schools, the medical and surgical treatment of disease of the various kinds can be watched from day to day, the properties of medicine and their effects upon the animal economy are given extended attention.

The young practitioner of veterinary medicine can now commence the work of his special calling with the consciousness of having acquired an amount of knowledge quite unknown to his elder brethren of a generation ago, at the beginning of their practice, and his patrons may feel a reasonable assurance that their property in his hands is not put in peril thereby. Of course, experience is of great value, but a foundation should be laid in the beginning, upon which experience can build a substantial structure of large attainment of tact, judgment and skill.

Very much advantage it would seem might be gained by an affiliation of all the veterinary practititioners in the State, in a State Veterinary Association. Such an association, meeting every three months or oftener, exchanging views on practical questions, discussing new propositions, relating experience with various diseases and methods of treatment, succeeded by friendly criticism and suggestion, throwing aside all attempt at appearing learned and wise, and taking instead the attitude of honest learners and seekers after truth, cooperating in every endeavor to elevate the standard of veterinary practice and add dignity to their chosen calling, and promote by social intercourse a warmer fraternal feeling, and that more sincere brotherly good will which contributes to mutual success.

The younger practitioners need not feel, with all their superior early advantages and more rapidly acquired attainments, that they can derive no benefit from the discussion of medical questions with their elder brethren in the profession. It will be found that their older brothers have profited by observation and experience, and by study also, and can give them many points which will be greatly to their advantage.

WATER SUPPLY.

LECTURE BY J. P. COTTON, C. E., BEFORE THE NATURAL HISTORY SOCIETY,
NEWPORT.

WATER SUPPLY.

A practical knowledge of air and water, two elements absolutely essential to the existence of life, it would seem should be possessed by every one; but because these are always available without the intervention of human power the question of their purity is seldom considered.

The impurities of the air are the more easily recognized by the sense. and consequently less danger is to be apprehended from them than from those of water.

To consider the sources of the supply, the storage and distribution of water is the purpose of this paper. The chemist tells us that water is composed of two elements, hydrogen and oxygen, in the proportion of two of the former to one of the latter; or by weight, 11.11 per cent. of hydrogen to 88.88 per cent. of oxygen. These chemically combine and form water, losing their gaseous form and their physical and chemical properties. This is pure water; such as is known in the laboratory only. It soon loses its normal condition by absorbing foreign matter which detracts from its purity. As vapor in the atmosphere, as rain falling to the ground and in passing over the ground to streams as it percolates through the soil to subterranean channels to springs, or as it runs in rivers to the sea, it takes up something that detracts from its purity. In the form of vapor it absorbs gases from decaying organic matter. In falling as rain it takes up the fine particles of dust and other impurities held in suspension in the air. As water passes over the land towards the rivers it gathers various impurities from decaying vegetation. It is also sometimes affected by its combination with the salts existing in the earth. These are some of the ways in which water may become impure in an uninhabited section, but when a section of country becomes the home of man, then comes a further and more dangerous pollution from the refuse of all kinds finding its way into the streams or through the soil to supply the springs. The question may be asked, if there are so many ways of contamination of water how are we to obtain potable water, and if obtained, how is it to be kept so? This would seem to be a very proper question, but it is not one that has received much attention as yet in this country.

In England, to whom we must so often turn for careful and painstaking investigations, much has been done to determine the safest courses of supply and the proper means of preserving the purity of the same. The reports of the river pollution commissions comprise the greatest part of the literature upon this subject and for that country seem to cover the ground very fully. In this country some of the States are awakening to the necessity of doing something to ascertain the condition of the sources of water supply, and to provide for removing the cause of impurities when found, and to preserve from contamination those that are pure; but in many very little attention is given to the subject, and among these I am sorry to have to include our own state.

In the sixth report of the rivers pollution commission is a very full account of the "chemical view of the water question." Their classification of waters is as follows:—1st, rain water; 2d, upland surface waters from uncultivated, or but slightly cultivated, surfaces not measured ; 3d, surface waters from cultivated lands; 4th, shallow well waters; 5th, deep well waters, and 6th, spring waters. Several hundred samples were analyzed and upon the results of these analyses the following divisions were made:—(1). "Wholesome" waters, including spring water, deep well water, upland surface water; (2). "Suspicious" waters, including stored rain water, surface water from cultivated land, and (3). "Dangerous" waters, including rain water to which sewage gains access, and shallow water.

Of all waters, they gave preference to spring and deep well waters. They say that water collected from uncultivated lands, when filtered through sand, is of good quality for domestic use. They class rain water as "suspicious," but state that when collected from clean surfaces and stored in clean receptacles it contains the smallest proportion of solid impurities, but the organic contamination somewhat exceeds that from springs and deep wells. They say that the water from cultivated lands, and from the under drains of cultivated lands, is always more or less polluted from the manure, even after it has been stored in ponds or reservoirs. As dangerous waters they place running streams into which sewage is discharged. They say no river in the United Kingdom is of sufficient length to secure the oxidation and destruction of sewage, although discharged into it at its source; and further, that no "process has yet (1868) been devised of cleansing surface water once contaminated with sewage, as to make it safe for drinking." They class shallow well water, located as the wells usually are near drains, cesspools and privies, as still more dangerous.

In this country, the board of health of Massachusetts has made extended and full observations of the present available water supply of that state, and their reports, beginning with 1870, are replete with information on this and kindred subjects. The general conclusions arrived at in regard to the danger from impure water supply do not differ from those of the rivers pollution commissions. But a small part of Massachusetts is as densely populated as England, and therefore the present danger is less, but even then they declare the danger real and call for such remedial measures as will secure to future generations the priceless boon of a potable water supply.

On general principles every intelligent person is willing to acknowledge the importance of a pure water supply, and if he lives in Rhode Island he will accept the conclusions reached in England, and perhaps in Massachusetts, but if it is suggested to him that his own supply may be impure he will almost resent it as a personal attack. The sensitiveness concerning criticisms on our own often prevents the correction of dangerous conditions. If the citizens of Newport are to reap any benefits from the work of the English commissions or the Massachusetts board of health or any other board of health, it must be by avail-ing themselves of the result of their examinations and, as far as they are applicable, adopting their recommendations.

Let us then consider the water supplies available in Newport and apply to them the classification used by the English commission of wholesome, suspicious and dangerous waters. Under "wholesome waters" we have, first, spring water. In Newport it may be said there are no springs,—certainly none that can be classed as sources of supply. Second, deep wells. Deep wells, as understood in England and generally so classed, are bored or Artesian wells, often many hundred feet in depth In Newport until within a few years there were none. There are now a few, notably those on Coaster's Harbor Island, at Fort Adams, one at Ochre Point, and two or more on Bateman's Point. The water from those on Coaster's Harbor Island is of good quality and thus far in quantity sufficient for the training squadron. At Fort Adams the supply is sufficient and quality satisfactory. The others are more recent, and I am informed that while the quality is satisfactory the supply is limited. These wells are expensive and are not likely to be resorted to for a domestic supply. Of upland surface water there is none available. This exhausts the list of "wholesome waters" of the English rivers pollution commission, and Newport's reliance not reached. Under "suspicious" we have stored rain water and surface water from cultivated land, and under "dangerous," river water to which sewage gains access, and shallow well water. Under the heads of "dangerous" and "suspicious" waters our supply must come.

That shallow well water is dangerous in a thickly settled community it would seem would be accepted by all; and it would be so accepted by every thinking person if he could consider it in the light of the experience gained by those whose calling leads them to examine this subject. In nearly every shallow well, and all wells in Newport are shallow save those mentioned above as artesian or bored wells, the water rises or falls as the season changes from dry to wet and from wet to dry, showing that its supply comes from the surface or near it. When a trench opened for a sewer drains every well for a hundred feet or more on either side of it, can there be safety in using the water from a well on a lot one hundred feet square which has a privy and perhaps a cesspool and stable on it? In a well recently dug in the compact clay, which we consider almost impermeable, the water had a peaty taste that did not disappear after being pumped out several times; an examination showed in a depression some one hundred feet or more away a peaty deposit; between this and the well was an elevation several feet so that communication between the two must be through the clay. There seemed to be no remedy and the well was abandoned. I refer to these to show that within the limited distances between dwellings in towns it is utterly impossible to have wells that are positively free from contamination. The fact that the well has been used many years is not a good argument in its favor—in fact the older it is and the longer it has been used the more likelihood of its being contaminated. If our wells are to be abandoned, and I strongly recommend it, then we have but two sources of supply, stored rain water and surface water from cultivated lands. These two sources we find classed as "suspicious." Let us consider for a few moments why they are so classed. Rain water collected from roofs in a manufacturing town will of course contain a large quantity of dust, soot and other refuse, and in every case with more or less organic impurities from the collecting surface, but in Newport we have no danger from the first, and I believe, as has been said by J. Bailey Dalton, an eminent English engineer, that "there exists no more certain source of a pure and sufficient supply than that of properly collected and properly filtered rain water." The best surface from which to collect rain water is undoubtedly slate, but wood can be made less objectionable than it usually is by keeping it clean from vegetable growth, the gutters clear of leaves and the roof from excrement of birds, this of course applies to surfaces of any material. The tanks or underground cisterns are often a source of contamination from their failure to keep out surface water. A cistern should, when practicable, be built in autumn, when the ground contains least water and therefore less liable to leak from the water forcing in through the cement joints. It should be built of good hard burned bricks, good cement mortar and plastered outside and inside to make it water-tight from without as well as from within. The arch should not be too flat, the surface of the ground over it should be slightly raised and the opening should be so curbed as to prevent the entrance of surface waters. Especial care should be taken in connecting the supply and suction with the pipes to cistern. It would be well to have the inlet pipe from the spouts, end near the bottom, thereby securing a better aeration of the water at each rain. The pipe leading from the cistern to the pump should have a floating suction, by its use the disagreeable odor due to stagnation, so often found in cisterns, is for the most part gotten rid of. The overflow of the cistern is important in that through it the chief danger from the use of the water comes. Whenever it is possible this overflow pipe should discharge on the surface, and rather than connect it with the house drain, as is often done, I would abandon it and allow the cistern to fill and flow out at the top. If connected with the house drain and trapped before it enters it, which precaution is often neglected, there will probably be a longer or shorter period during the summer when the cistern will not be full enough to overflow and the water in this trap will evaporate until the seal is broken when the communication for gases from drain to water in the cistern will be uninterrupted. Again, should the house drain become obstructed outside of this overflow, the drainage would often run back through this overflow into the cistern before attention would be called to it. The spouts from the roof should be provided with "spills" so that the washings from the roof can be excluded. Every cistern from which water is used for domestic purposes should be cleaned at least once a year, preferably in the fall after the leaves have fallen.

The public supply of water of Newport is collected mainly from cultivated land and comes under the head of "suspicious" waters, as classed by the English. All here are familiar with the gathering ground and the storage pond and reservoir. You are also familiar with the water by its use, and since its introduction there has been, we think, no reasonable suspicions that its use has been injurious to health. There are times in warm weather when the pond contains a large quantity of vegetable matter which discolors the water. The margins of the pond, particularly at the upper end, are covered by a growth of what are commonly known as water weeds. These weeds start from roots at the bottom. They are not likely to cause trouble unless they are suddenly killed in summer by lowering the water level. The death of weeds in autumn is not likely to be attended by danger. From the examinations made of the vegetable growths in the ponds of the Boston water supply, by Professor Harlow, published in the first annual report of state board of health, lunacy, etc., of Massachusetts, it seems that no well defined odor or taste has come from decaying weeds.

There is, however, a class of plants known as algæ which grow on or near the surface of the water which form threadlike or slimy masses sometimes of large extent. These algæ Professor Harlow divides into two groups, those which are grass-green or yellowish green and those which are bluish-green or purplish. He says that grass-green algæ have no injurious effect on the water in which they grow; their presence is regarded as an indication of purity for they do not grow in impure water. The class of algæ which have a bluish green color, are like the grass-green in form, but they may be distinguished by this difference in color, and it is their presence and decay to which we may ascribe some of the most disagreeable tastes and odors found in drinking water. He describes them as bluish-green but says they sometimes assume a purplish tinge. The plants of this division belong to the Nostoc family. So long as they are living and not excessively abundant they produce no perceptibly bad effect on the water; but when large quantities decay they give rise to the pig-pen odor which has recently caused considerable trouble and still more alarm. They first appeared in the storage ponds of Boston supply in the intense heat of July and August, 1876. The pig-pen odor was at first intense but soon disappeared. Again, in 1869, the same trouble was noted. These plants flourish in a high temperature, but a burning sun kills them when they do not float in sufficiently deep water. These plants when present make the water unfit to drink at times, but they do not cause specific diseases whose origin is explained by the germ theory. In the pond from which Newport is supplied there has been a growth of the grass-green algæ, but I have never seen any of the bluish-green variety. If there is any it has not yet grown in such quantities as to make its presence known by the disagreeable odors referred to by Professor Harlow.

Another, and I think real cause for solicitude, is in the fertilizers used on the farming lands embraced in the water shed from which the supply is collected. It is now generally accepted that the excreta of a patient suffering from typhoid fever carry the germs of the disease and if these reach the water supply an epidemic of this disease may follow, as was the case in Plymouth, Pa. We are all aware that large quantities of night soil are used on the gathering ground of this supply; much of the area is under high cultivation and this is likely to be increased. This night soil is applied to the land chiefly in winter when the ground is frozen so that it cannot be absorbed, but remains on the surface to be washed into the pond by the first rain. The decay of vegetable matter in the pond may give unpleasant tastes and odors to the water but I apprehend danger from the use of the water in winter when it is agreeable to taste and smell rather than in summer.

Having collected rain water in properly constructed cisterns or introduced the city supply into our dwellings, the proper manner of supplying it to the fixtures in the house should be considered. The water supply is usually led through the wall in iron pipes and thence to the various fixtures through lead pipe, because it can be readily bent to the changes in direction. Lead pipe has been very generally used for this purpose, although at times cases of lead poisoning have occurred which have been directly chargeable to the use of water drawn through lead pipes. In 1870 the Massachusetts board of health addressed this question to their correspondents:—"Have any cases of lead colic or lead paralysis occurred in your town or districts, in which you have been able to trace the origin of the disease to water pipes?" Out of one hundred and seventy answers from as many different places, forty-one answered yes and twenty expressed doubt. Professor William Ripley Nichols says that "in all natural waters lead suffers corrosion to a greater or less extent, but that all the conditions upon which this action depends are not accurately known, so that we cannot say whether a given water will act slightly or violently upon the metal."

From examination of Cochituate water, he reports that Cochituate water which has passed through lead pipes is never absolutely free from lead; that when the water passes through a lead-lined tank it will be likely to contain in solution or suspension a more considerable quantity of lead salts, from the fact that the lead is more rapidly corroded on the sides of the tank near the surface of the water; that pipes used to convey *hot* water are corroded more or less rapidly, the corrosion manifesting itself more decidedly in the vicinity of the solder joints and at the sharp bends. At the same time it is said that no well authenticated case of lead poisoning had been known from its use.

Lead poisoning from use of Croton water is almost unknown, so that we must conclude that while the water takes up a small quantity of lead it is not sufficient to cause the destructive diseases, paralysis and wrist drop, yet it may be that some of the minor ailments are due to it.

I have not learned of any case of lead poisoning from the use of water drawn through lead pipes in Newport, and yet we have abundant evidence that lead is rapidly corroded by it. Here are some specimens of pipe that have been in use but a few years. I am informed by the plumbers of the city that they have been frequently called upon to renew pipes that have been in use not more than three years. This has been in all cases in or about the tanks. That there have been no cases of lead poisoning here seems to me surprising, for certainly the water must contain a large amount of lead where corrosion is so rapid.

What shall we use in its place? is the question. Iron from its cheapness suggests itself: this on the score of health is unobjectionable, but it is not adapted to the devious passages required for domestic convenience; another objection is found in the rusting of the pipes. To obviate this galvanized iron is sometimes used. The zinc coating is not objectionable on the score of health, but it is seldom so completely done as to entirely prevent rusting. Block tin pipes are good on the score of health, but they are expensive for general use. Tin lined lead pipe has been made use of and it is said that it stands well. Brass tubing is not regarded with favor. Glass tubes, and iron lined with glass or porcelain, seem to answer the conditions required by health, but they are not economical.

TRAVELS
OF
INTERMITTENT FEVER
IN
RHODE ISLAND.

By FRANKLIN C. CLARK, A. M., M. D.

PROVIDENCE, R. I.

The Travels of Intermittent Fever in Rhode Island.

Now that the recent epidemic of malarial fever is on the wane, and people are beginning to shake off their fears, it is thought that it may be of interest to follow the travels of the disease in our State, learn its points of entrance and departure, discover whether it be indigenous to our climate, or to New England generally, or an occasional visitor, and to weigh the chances of another outbreak of it in the distant future, and, if expected, to consider what possible means we may have at hand to repel an invasion. It is for this reason that the study of epidemics of intermittent fever in the past offer a possible solution of the problem, and though the light which they shed may not always be satisfactory, yet enough may be learned to demonstrate the existence of a law, upon which these individual outbreaks depend, of a similar character to those determining the mode of spread and propagation of cholera, diphtheria, or other epidemics of whatever virulence, when the proper conditions of each particular disease are fulfilled.

It is exceedingly to be regretted that our ancestors, amid their voluminous and erudite treatises on theological subjects, could spare so little space for the consideration of epidemics. The little which has come down to us is scattered piecemeal through various treatises, where these matters occur but incidentally, and then only to illustrate incidentally the working of the moral law. But we are thankful even for these morsels which have escaped the general distortion of natural phenomena. For the facts, fortunately remain, however interpreted. So we must descend to the first half of the eighteenth century ere we can find anything satisfactory in the way of positive history.

It is purposed, then, in the present paper, to use the past epidemics of intermittent fever in Rhode Island, and especially the one of

1880 and 1881, to show our advantages in the means of observation over those of our ancestors, plus the experience, whereby we hope to determine in some degree the law of its progress, after which will be described the course of each outbreak as far as known, using material for this object which has unexpectedly been obtained, and which Dr. Holmes in his dissertation was unable to procure when speaking of the early epidemics of the disease in New England. The course of three such epidemics are more or less accurately traced out on the map by a careful examination of the Annual Reports of the State Boards of Health of Connecticut, Massachusetts, Rhode Island and New Hampshire, as well as by reference to original unpublished matter.

As Dr. Holmes' essay has for its especial object the history of the outbreaks of intermittent fever in New England generally, dating from the earliest times down to 1838, the time of his writing, we shall simply draw from that interesting and faithful source when it furnishes any facts for the explanation of the spread of the disease in Rhode Island. From these gleanings among past records, traditions, and from the memories of living witnesses of a generation passing away, which he has so industriously and uniquely gathered, we learn that the New England colonists were called upon at different times to cope with the disease, and that it was accompanied with more or less fatality. The ancient records of New England corroborate this, describing it under various names in the rude nosology of the day, among which "bilious fever," or a "pestilential disease" figure pretty prominently. But the distemper did not seem to fix itself to any particular spot. The disease came, and then departed. There seemed to be a periodicity to its outbreaks. Did we believe in the entity of diseases we might compare its advance to an army of locusts, or the eruption of a volcano. For a long time it remains quiescent, then, at length, becomes active and enters upon its travels northward and eastward, to the terror of the people whose knowledge of a former outbreak is but a vague tradition. On it goes sweeping along the shores of bays and gulfs, entering the coves and inlets, passing up the rivers and streams, and, following their course, spreads like a host of army worms over the entire country. After a longer or shorter period it leaves for other fields wherever the conditions favor its course, and departs as silently and mysteriously as it appeared, to reappear when the memory of it has partially faded away.

Another point besides the periodicity of its outbreaks, which Dr.

Holmes has established, is the distant source of the infection. On a comparison with ancient writings and the recollections of old people who had lived during its prevalence, Dr. Holmes found that all the epidemics which have appeared in New England, particularly in Massachusetts Bay and Plymouth Colonies, point to the valley of the Housatonic as the starting-place of each outbreak. And though no intention was implied to shift the responsibility of originating the disease to the shoulders of another State, it at least was satisfactorily proved that intermittent fever was not indigenous to New England outside of New Haven Colony. But as fifty years and more have passed, and a new epidemic has appeared among us with no lack of keen observers, and careful investigators, the breaks left necessarily by Dr. Holmes have been satisfactorily filled, and future generations will find the epidemic of malarial fever in 1880 and 1881 not treated in so fragmentary a manner as theories in the days of yore.

The epidemic of 1880 and 1881 has not only confirmed these two points illustrated in the dissertation above mentioned, but has fixed the malarious fountain-head beyond the bounds of New England altogether. The natural home of malarial fever, from whence all outbreaks of it in New England can be traced more or less clearly, is confined to a district near the mouth of the Hudson, and comprising the coast of New Jersey. Here the disease can be said to be indigenous, or endemic, as that region is never free from it. All epidemics of intermittent fever enter New England proceeding in a general northeasterly direction by way of the extreme soutwestern part of Connecticut. Thus the epidemic of 1880 and 1881 entered that State from Long Island about the year 1860, gradually worked its way along the shores of Long Island Sound on the Connecticut side and was twenty years in reaching Westerly, at which place a portion of the epidemic stream passed into Rhode Island. This epidemic wave reached Long Island about the year 1850, skirmishing around the Sound ports of Connecticut before entering upon its travels northward with any degree of precision. And this course seems to be the one pursued by all previous outbreaks of the malarious disease of which we have any definite knowledge. Hence we cannot fail to appreciate the fact that malaria is subject to outbursts of intensity which causes it, by some unknown law, to invade regions at different periods, and to disappear again without any appreciable cause. Furthermore the poison of malaria is not carried from person to person as in the case of small pox, yellow fever, and other contagious diseases, but follows the tenor of its own way augmenting or lessening in virulence irrespective of the number of its victims.

It was the belief held by the old authorities that malaria originated from the effluvia arising from decomposing animal and vegetable substances. The presence of moisture and heat promoted the infecting effluvia, in fact was almost absolutely necessary for its production. Thus ponds, swamps, flooded timber lands, low marshy or swampy districts were considered the foci of marsh fevers, and malarial diseases generally. On removing these conditions, or avoiding the production of "drowned lands," as they are called, the disease usually disappeared from the neighborhood. For obvious reasons, then, our ancestors eschewed the "bottom lands" and enthroned themselves upon the hills where they imagined themselves out of the reach of the dreaded scourge. But the late epidemic not only visited localities remarkable for their alleged intermittent breeding capacities, but also the dry places and the hilltops, thus setting at defiance the accepted theories of a past generation. Indeed, though we must acknowledge that outbreaks of fever and ague are more virulent in moist districts than elsewhere, yet the fact remains patent that these supposed infectious spots have existed for years without a case of intermittent fever appearing, unless it was imported, and still exist to-day when we know the disease is disappearing from Rhode Island. Again, during outbreaks of the distemper it is not every marshy or swampy district that becomes a focus of infection.

Then, too, we can trace the whole progress of the late epidemic, at least, and must regard other causes as operating in sending upon its travels that malarial wave. The "germ theory" of disease must likewise be modified to fit the new aspect assumed by this affection, namely, the development of its traveling capacities. For were the disease endemic, as in the southern and western States, a swamp or a marsh would be considered as furnishing the exciting cause of every fresh outbreak.

The scanty records of some of the past epidemics of malarial disease, not only occurring in Rhode Island but in other parts of New England, confirm this view. Thus when an epidemic appeared at Providence, in 1758, on the raising of a mill-dam on the Moshassuck river, to the north of the city, great fear and indignation were occasioned among the people of the infected neighborhood, who considered this action the direct cause of the outbreak, and threatened in their excitement to burn down the dam. However the dam remained untouched; and in a year or two the neighborhood became as healthy as before.[1]

Another illustration to the same effect was seen in the arguments brought out in a trial for trespass at Litchfield, Connecticut, in 1800. The plaintiff had raised a mill-dam over the Housatonic river at New Milford. Certain persons, claiming that the outbreak of intermittent fever in the neighborhood, in 1796, was occasioned by this raising of the dam, had partially destroyed it and were now sued for damages by the owner. A dam had formerly stood for sixty years at or near the site now occupied by the present one. The dam complained of had been raised only ten inches. The plaintiff further proved that in 1796 there were many cases of bilious fever, which were strongly marked, when the dam had not been altered at all. It was also stated that in 1757 a "malignant fever (as it was then denominated) raged, to the destruction of about forty inhabitants; that in 1777, the dysentery prevailed, which was said to have been brought from the army, and that the fever and ague had always been a disease of New Milford; that the towns through which the Housatonic river runs, have been frequently visited with bilious fevers, and that too where no mill-dams could be referred to as the causes.

"It was proved, that the same disease as the one under consideration, had prevailed in many places, in this and the States of New York and Massachusetts, within the last five years, where no mill-dams or ponds could have operated—on the most elevated hills, and in situations hitherto deemed the most healthy;—that in Great Barrington, and West Stockbridge, the disease appeared remote from the ponds, while the people in the vicinity of them enjoyed usual health.

"It was admitted, that the exposing of vegetables or animals, or other substances capable of being reduced to sudden putrefaction, to the sun, by drawing off water, draining ponds, or clearing up low grounds, tended to produce disease; but certainty, or even connection, as to particular instances in which this consequence had followed, seemed scarcely attainable."[2]

The plaintiff was accordingly awarded damages for the injury done his dam.

Of the late epidemic of malarial fever, Dr. Wilson in an article on

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[1] Moses Brown on Yellow Fever in Providence, in 1797, etc. MS. pp 197 foll.

[2] Mem. Conn. Acad., Vol. I, pt. 1, pp. 131, foll., also quoted by Dr. Holmes.

"Epidemic Intermittent Fever, etc., in Connecticut and other parts of New England," says:

"In this epidemic we may be sure that ague is not produced by 'heat, moisture, and decay,' arising from ponds, reservoirs, swamps or low grounds, overflowed by freshets, or exposed by evaporation; for new cases arise at any and all seasons of the year, and upon the highest land, as it has done in one-third of the towns in the State; nor by uncovering lately submerged lands, for in most towns no such lands exist. Not only does the disease not appear under the conditions appropriate to the paludal theory, but it does not confine itself to, or remain in, the alluvial tracts, even when established upon them.

"Not from 'disturbance of earth' by grading, ditching, or railroad building in the country, or by laying down sewers, or gas or water pipes, in towns; for these operations have been going on for ages, while no ague came because of them, and it did appear at the same relative time in territory whose surface had or had not been disturbed.

"Not from the 'transportation of clay, manures, or other decaying and fermenting substances, from New Jersey and New York,' or of sawdust in the river beds, floated down from the mills of the north, for in several towns so affected none of these things have been introduced to this day, and in others the disease failed to appear at the time called for by the theory.

"Not from 'stagnant, or even foul water,' no matter how offensive to smell or taste; for water with these qualities has always existed in many towns free from ague, and, on the other hand, many tracts of dry and sandy soil have been its favorite haunts.

"Not from *bacillus malariae* in the water, which would be carried *with* the current, while ague moves up stream, and *against* the current of every principal river in Connecticut."

He further denies the agency of the winds in carrying the germs into the country, for the direction of the wind for Connecticut and for New England generally during the year, was, for the most part, entirely opposite to the course of the ague. Neither was it produced *de novo* from bad drainage or collections of filth and impurities. This writer covers a period of twenty-three years.[1]

On the other hand there is sufficient evidence to show, that though stagnant pools, swamps, overflowed tracts and "bottom lands" generally do not originate (with us at least) malarial diseases, yet, both in past epidemics and in the one recently affecting New England, wherever the disease was most prevalent, it was in the near neighborhood of such localities; in the Housatonic Valley in Connecticut, and in many other such places noted in Dr. Holmes' essay. Similar conditions existed in Providence in 1758; in North Kingstown in 1777. A generally low condition of ponds and reservoirs have also been remarked.

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[1] Vid. Report of State Board of Health of Conn., for 1882, pp. 206–8.

During the recent epidemic similar conditions existed. In Connecticut the majority of towns affected are situated upon rivers or in their neighborhood; fifteen on the Connecticut river, seven on the Housatonic and fifteen other towns on other streams.

In Massachusetts fifteen of the towns affected are situated on the Connecticut river, six on the Housatonic, and nine on the Hoosick, Merrimac, Taunton and one or two other rivers.[1]

In Rhode Island the first cases were at Nayatt, (1880) to the number of nearly two hundred, a brickyard in close proximity to a large body of water and in the neighborhood of swampy, marshy tracts. In Providence and Cranston (in 1881), two or three hundred cases were noticed in the vicinity of two large ponds situated, one in Cranston just over the Providence line, and the other over the Cranston line in Providence. Westerly, a town affected simultaneously with Nayatt, is on the Pawcatuck river. The wave of fever and ague generally followed the course of the rivers and streams against the current.

In New Hampshire the epidemic was chiefly confined to a district in the vicinity of the Connecticut river and its tributaries, and the Merrimac in the extreme southern part of the State.[2]

Vermont, according to the registration reports during the epidemic years, had but a very few sporadic cases.

Maine, so far as learned, did not experience the disease.

Now if the malarial germ, or poison, whether of an animal or vegetable nature, is developed most abundantly in marshy districts and low grounds it follows that heat, moisture, and vegetable decomposition must furnish it with the necessary elements for its propagation and spread, though they may not originate the disease *de novo*; while the appearance of cases, in greater and less numbers, in localities of considerable elevation, far removed from any river, or source of moisture and vegetable decay, must be attributed to the agency of winds which blow from the direction of the infected districts. Again dryness and a low temperature seem to cause disappearance of malarial diseases. Fogs and mists are also supposed to play an important part in its distribution. This fact would explain the appearance of the disease in places remote from the general stream of the epidemic and hence must be considered as one of its erratic features.

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[1] Report of State Board of Health, Mass., pp. 95, foll.

[2] Report of State Board of Health, New Hampshire, 1882.

If, then, outbreaks of malarial fever are dependent so much upon certain topographical conditions, why, when such conditions are remedied, should we continue to have epidemics of the disease?

This view is by no means new. Drainage for the purpose of checking marsh fevers, is not a modern idea. As early as the fifth century before our era, Empedocles, a native of Agrigentum, found he could remove a malaria by draining a swamp. He also built a high wall, at another time, to protect a town exposed to a similar affection. In both instances he was successful.

Another instance belongs to perhaps an earlier period. As early as 640 B. C. the Pontine (or Pomptine) marshes at Rome had been active in propagating a malaria. They were forthwith drained, and a cessation of the disease resulted. This was done from time to time, as the case demanded, with more or less improvement of the public health. During the Pontificates of Pius VI and VII, a similar procedure was adopted with success. By such means the disease was abated, and the health of the neighborhood improved.[1]

Again, by a system of artificial drainage the sites of Populonia, Saturnia, Cosa and other ancient Latin towns were rendered capable of being inhabited and fertile. The southern portion of Etruria, especially that part now known as the "pestilent Maremma," was rendered by like means fit for habitation.[2] Other parts of Europe seem to have presented like examples.

In speaking of the improvements made since 1827 in the Tuscan Maremma, Mr. Marsh says: "The mountains of the Maremma are healthy, the lower hills less so, as the malaria is felt at some points at a height of 1,000 feet, and the plains, with the exception of a few localities favorably situated by the seacoast, are in a high degree pestilential. The fixed population is about 80,000, of whom one-sixth live on the plains in the winter and about one-tenth in the summer.

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[1] Momsen's Hist. Rome, Vol. III., p. 404; Burns' "Rome and the Campagna," p. 26.

[2] Burns' "Rome and Campagna," p. 358.

Nine or ten thousand laborers come down from the mountains of the Maremma and the neighboring provinces into the plain, during the latter season, to cultivate and gather the crops.

"Out of this small number of inhabitants and strangers, 35,619 were ill enough to require medical treatment between the 1st of June, 1840, and the 1st of June 1841, and more than one-half the cases were of *intermittent,* malignant, gastric, or catarrhal fever. Very few agricultural laborers escaped fever, though the disease did not always manifest itself until they had returned to the mountains. In the province of Grosseto, which embraces nearly the whole of the Maremma, the annual mortality was 3.92 per cent., the average duration of life but 23.18 years, and 75 per cent. of the deaths were among persons engaged in agriculture.

"The filling up of the low grounds and the partial separation of the waters of the sea and the land, which had been in progress since the year 1827, now began to show very decided effects upon the sanitary condition of the population. In the year ending June 1st. 1842, the number of the sick was reduced by more than 2,000, and the cases of fever by more than 4,000. The next year the cases of fever fell to 10,500, and in that ending June 1st, 1844, to 9,200."[1]

In 1741 a similar procedure was followed in the territory of Pisa; sluices and lock-gates were constructed to prevent the salt water and fresh water from intermixing. The next year was marked by the disappearance of fevers which had long been prevalent in that region. But in 1768 and 1769, when the sluices and water gates were suffered to fall into neglect, fevers returned of a more malignant type; when the gates were restored, health returned to the neighborhood. The same evil consequences followed in 1784 and 1785, and between 1804 and 1821, when these sluices were again neglected. By this bitter experience, however, the inhabitants were fully convinced of the necessity of keeping the sluices and water gates in constant repair. From that time on the whole country has enjoyed an uninterrupted healthfulness, and Viareggio, the capital of the district, once so avoided on account of its unhealthfulness, has become famous for its sea baths and salubrious climate.[2]

Coming to our own country, we find that even the rude efforts of the settlers in cultivating and draining the soil have been attended by a lessening, if not a total extinction of the disease. Had their means allowed them, or the present mechanical appliances for drainage been in existence, we would have been better prepared to grapple with the problem. As it is, however, the early and present settlement of new States and Territories all point to *drainage as the surest means by which we may be able to extinguish what is known as malarial fever.*

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[1] The earth as modified by Human Action. Revis. Ed. 1877, pp. 528-532.

[2] Loc.cit.

New York, Virginia, Maryland, Indiana and Ohio, by various systems of drainage, lessened the affection: and in some instances a steady decrease has followed for many years.[1]

Considering these facts we would therefrom deduce this corollary: the more defective the drainage of malarious countries, the greater the prevalence and severity of the disease; and conversely the greater the diminution, and the nearer the approach to total extinction the more improved have been the methods of drainage.

It now remains for us to trace the travels of intermittent epidemics in Rhode Island, their source, their periodicity, and the localities where their greatest severity was felt.

EARLY OUTBREAKS.

Whatever accounts we have of the early outbreaks of malarial fever in New England, are at best but meagre, vague, almost of a traditional character and unsatisfactory. The essay of Dr. Holmes is the usual authority quoted for information on this point; though in most instances I have quoted original authorities to which he also refers.

In 1633 we learn, therefore, that the colony of Massachusetts was visited by a pestilential fever, which was attributed to large swarms of "humming flies." It prevailed throughout May, June, July and August of that year—evidently not small-pox. Again, in 1647, an "epidemic disease," as it was called in those days, passed through New England; whites and Indians alike suffered. It began with a chill, and in many instances was accompanied by fever. Whoever employed cold drinks generally died; while those who used cordials and supporting treatment for the most part recovered.[2]

In 1723 we have accurate accounts of the first indubitable appearance of intermittent fever in Rhode Island. It occurred between the months of July and October and was termed "Burning Ague."[3] It spared neither age nor sex of the white inhabitants; 18 men, 16 women and 9 children, 43 in all; died. "Gov. Hopkins informed me that only one person who had the disease recovered."[1] A list of of the fatal cases was kept by an ancestor of my authority, Mr. Brown. By this record, then in his possession, he says, that the "disease reached from Pawtucket to Pawtuxet and extended round west and northwest into part of Smithfield, North Providence, Johnston and Cranston which then all belonged to Providence. But it does not appear by the names that any of them lived within the present (1805) bounds of Providence." "The epidemic state of the air," he continues, "was therefore most probably increased by local effluvia arising from swamps and low lands having the timber newly cut off and letting in the sun which raised a noxious effluvia from the stagnant waters, mud and rotting vegetables."[2]

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[1] Report, Mass. State Board of Health, 1880, pp. 104 foll.

[2] Hubbard's Hist., New England, pp. 194 foll. These flies were "Cicadas," or harvest-flies.

[3] "Cold Fever" was another name applied to it.

The disease did not appear to be rife within a radius of three miles of the market in Providence. According to the account of an old man, aged 94, it seems that the outbreak of the fever had also prevailed in Warwick and many other localities, and that "many had the disorder, and many died with it, though it does not appear to have been so mortal in general elsewhere as in the neighborhood of this town." Those who died within his knowledge, "died at or before fourteen days; and the next year the long fever (typhoid) was prevalent. By the best calculations I can make there could not be more than one-eighth part of the inhabitants within the limits of that fever that there are now in Providence,[3] [between 8,000 and 10,000] so it appears the mortality must have greatly exceeded (in numbers who had it) the yellow fever here last summer."[4]

Now, if we supply a few missing links, we shall discover that the same general course of this early epidemic of malarious fever was similar to that pursued by the one still lingering among us. Dr. Holmes has shown in his dissertation that all the early epidemics of malarial disease can be traced to Connecticut, to the valley of the Housatonic river; that sometime previous to an outbreak in Massachusetts the malaria had prevailed in the New Haven district. This is also true of the late epidemic. For in 1677 and 1678 it was rife at New Haven, and also in 1700; thus having ample time to take the shortest and most natural road to Massachusetts and Rhode Island.

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[1] Moses Brown's "Account of Yellow Fever, etc.," pp. 101 foll.

[2] Loc. cit.

[3] Providence at this time, (1797), numbered over 7,000.

[4] Moses Brown's "Account of Yellow Fever," et loc. cit. See map.

But the element of time does not seem to have been an important factor in its spread, as the disease travels sometimes so slowly as to require from fifteen to twenty years to go as many miles, and in one or two instances it required from twenty to thirty years to travel across the State of Connecticut.

In 1743 the disease seems again to have reached Rhode Island. It was, however, of brief duration, confined to a very narrow area, prevailing among an Indian tribe in the vicinity of Massachug, a small stream to the south of East Greenwich, and fatal to most of those attacked. The Indians on the southwest passed an edict forbidding, on pain of death, those who lived on the affected side of the river to have any communication whatever with those living on the healthy side.[1]

Again, in 1758 a mill-dam was raised in Providence on the Moshassuck river, and nearly all the people who lived in the neighborhood were affected with fever and ague, which caused much alarm and indignation; and in their excitement the inhabitants threatened to burn the dam down. It stood, however, and in a year or two the disease disappeared of itself, and the neighborhood once more became healthy until 1798, when a fever broke out again there under similar circumstances. At the north end of the town in about the same locality the flume of a mill had been drawn off for repairs, thus exposing to the heated atmosphere a large surface of accumulated filth and impurities. The odor was so offensive as to be perceived for quite a distance, and as many as thirty persons of both sexes and various ages were attacked by the fever, six of whom died, one a physician. The yellow fever was supposed then to be still lingering in Providence. One or two persons sick with that distemper were reported by the inspecting physician. Those affected were all jaundiced. This symptom rendered the diagnosis more difficult. It was doubted, however, as to it being true yellow fever.[2]

Going across the line to Connecticut once more, we find malaria raging there in 1725, pursuing a similar course. Rejecting the outbreak of 1743 in East Greenwich, among the Indians, we still had sufficient reasons left us for supposing the disease was at that time in Rhode Island, ready to break out the moment the necessary conditions were fulfilled.

In 1777 the "Indians at Quidnesset Neck, North Kingstown, had a bilious fever, extremely putrid and proved fatal to most who had it—a few instances only of recovery of those who had it. A few families of white people had it less mortal."[1] According to other authority it appeared also in Providence.[2] The number of observers was small, and the reports unsatisfactory. It may have been a portion of the epidemic stream in Connecticut of 1725.

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[1] Moses Brown's "Account of Yellow Fever," etc., p. 113.

[2] Ibid.

From 1811 to 1843 malarious fever prevailed in Connecticut from Greenwich to the county of New London. It remained over fourteen years on the other side of the Housatonic river. In 1837 we hear of its reappearance in New London county.[3] Its rate of speed was so various that we can base no opinion upon it. It must have been a year or so after this that the disease invaded the State of Rhode Island; for it was in Cranston between 1830 and 1840,[4] if we assume its rate of travel to have been as great as in the epidemic of 1880 and 1881, which was between thirty and forty miles a year; though it was two years in traveling from Barrington to Bristol, a distance of only six miles. Dr. George W. Jenckes throws still greater light upon this epidemic. Among the information which he was kind enough to give me, he says that "about 1841 or 2 there was an extensive epidemic here (Woonsocket) of fever, dysentery, etc., of malarial origin, from local causes." Thus the epidemic in Rhode Island must have occurred nearer 1840 than 1830. It has been claimed that Massachusetts was free from intermittent fever after 1836 till the late malarial distemper. Should we be able to find the connecting links between the appearance of the disease in Cranston and its outbreak in Woonsocket (at that time included in the whole town of Smithfield) we would find that this fever there was the end of the wave of malaria which started from the Jersey shore sometime before 1811, and passed through Connecticut and Rhode Island in a northeasterly direction.

OUTBREAK OF 1880 AND 1881.

Our knowledge of the late outbreak[5] of intermittent fever will undoubtedly throw much light on the study of the past appearances of it, not only in Rhode Island but in the rest of New England; and by tracing its progress carefully, step by step, we shall be able to learn in some degree its mode of approach. Perhaps by such knowledge we may be all the better prepared to stem its advance, when it makes its appearance again in those places which are in its usual line of march.

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[1] Ibid.

[2] Report of Mass. State Board of Health, 1885-6.

[3] Report Conn. State Board of Health, 1881, p. 145.

[4] Report Mass. State Board of Health, 1880. p. 53.

[5] For material for explaining this outbreak I am indebted to the Annual Reports of the Rhode Island State Board of Health, from 1880-1884, and to correspondents.

Intermittent fever invaded Rhode Island simultaneously at two distinct points, one at Westerly and the other at the Nayatt Brick Company's works in Barrington. As the chief part of the epidemic stream came by way of Westerly we will concern ourselves first with that. On the map red lines have been drawn, as accurately as possible, to show the advance of the disease from point to point' and where it seemed to prevail more extensively, to establish epidemic *foci*, as it were, circles of larger size have been made.

The wave of intermittent fever which entered Rhode Island in 1880 can be traced directly back to the New Jersey shore, where malarious disease, as previously stated, is endemic. It began its travels sometime anterior to 1850, when it reached Long Island, at the same time invading Connecticut, but then chiefly confined to Long Island and a few Sound ports on the Connecticut side until 1860. It was in New Haven in 1864, and in New London county in 1880, when it jumped the same year from the Thames river to Westerly, a distance of twenty miles. It did not appear in Stonington till 1882, and in Groton till 1881, both towns in New London county.[1]

Although sporadic cases of intermittent had been reported sometime before 1880 in the vicinity of Westerly, yet the disease did not begin its march through Rhode Island until this time. During this year the disease appeared in Hopkinton and both Charlestown and Richmond, where the Pawcatuck river separates these last two towns, at Clarks and Shannock Mills. The following year it had advanced into Hopkinton, by way of Woods river, as far as the village of Hope Valley. The main stream passing up the Pawcatuck river entered some of its small tributaries, leaving but a trace in Exeter on the eastern border, skipping South Kingstown wholly, as well as North Kingstown, reaching East Greenwich in 1881. Nearly five miles to the east of the Shannock Mills the Pawcatuck is traced to a pond which is fed by two or three small brooks. The district about this pond is swampy and would seem to be a fruitful source of the spread of the disease. But this region was not infected, if at all, until 1886, when it for the first time made its appearance in South Kingstown. North Kingstown may have been slightly affected in 1881 when the disease invaded the southern border of East Greenwich, but definite reports came from there for the first time in 1884, in the vicinity of the former towns.[1]

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[1] For epidemics of malaria in Conn. see 4th, 5th and 8th Reports Conn. State Board of Health; Mass. Report State Board of Health, 1880.

Its course was quite rapid, leaving its traces in all the towns along the western border of Narragansett Bay from Charlestown (except those skipped over) to Cranston and Providence. In 1881 the main stream reached Providence and Cranston and broke out with great intensity in the vicinity of two large ponds, known respectively as Mashapaug and Spectacle pond. Here the disease seems to have showed its greatest violence, if we except Barrington, though there the epidemic was not quite so severe. These ponds acted as foci to the disease, and fostered and generated the infecting material. From this center the neighborhood was infected within a radius of from one to two miles. According to the report of Dr. Batchelder, who practiced in that town at the time, it was not a perfect circle, but an ellipse, about one mile and a quarter in its shorter diameter, and two miles in its longer, a fourth of which was included in the city of Providence. The two ponds above mentioned were the two foci, Mashapaug being in Providence, and Spectacle pond in Cranston. Several hundred people were infected within this ellipse. As far as can be ascertained the disease was not of a fatal character, notwithstanding its severity. Compared with the epidemic of 1723, when about five per cent. died of those taken, it was of a far milder type.

The next year (1882) it passed into Johnston, North Providence, and southern Smithfield, by the Woonasquatucket river, where it can be traced from Cranston Print Works, through Manton to Centredale.

In 1883 it was seen at North Scituate. In Smithfield it remained for a whole year, entering North Smithfield and reaching the Massachusetts line in 1883. Woonsocket may have been also affected by this portion of the wave.

Malaria after 1881 began to spread westward and distribute itself along the different water-courses. From Providence it followed the Moshassuck river, slightly affecting the northern part of the city near a pond. It is probable from the same source portions of Lincoln and Pawtucket were invaded, though these chiefly received the disease on account of their situation in the valley of the Blackstone river.

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[1] The malaria was reported in North Kingstown in 1880; but as there still remains a doubt concerning the cases, Dr. Fisher does not consider them of value.

After invading Warwick in 1881 it reached the village of Pawtuxet on the east, in 1882, but the villages of Pontiac, Natick, River Point, Arctic, Centreville, Crompton and Old Warwick, in 1881, and Quidneck in Coventry not till 1884, and Coventry Centre in 1885, the means of invasion being the Pawtuxet river and its tributaries.

Simultaneous with the first appearance of the fever in Westerly was its outbreak in Barrington, at the works of the Nayatt Brick Company. Here nearly all the workmen were affected at one time and another, some two hundred in number. The infected region has been so fully described in a previous report that a repetition of its description here is unnecessary. Here was one of the chief *foci* of the disease, with all the supposed conditions favorable for its propagation. Here the distemper was confined till the following year when it began to extend its travels to the neighboring towns and villages. The town of Barrington generally was then visited, East Providence on the north, then Warren on the south. Following its northward course we find it more rapid in its travels than the main current. It reached Pawtucket, Lincoln and Cumberland in one year, and Woonsocket and the Massachusetts line in 1883. Its course southward was slower, requiring one year to reach Warren, only two miles distant, and another year to visit Bristol, five miles further below. According to a report by Dr. Wellington, who practices in Massachusetts near the Rhode Island line, intermittent fever first appeared in Swansea, the first town east of Warren and Barrington, in 1882, in Fall River in 1882, and Somerset, a town on Taunton river, just below Dighton, in 1883 ; in Rehoboth also in 1882. Another reporter, Dr. Merchant, of Warren, states that he first saw a case in North Swansea, August 19, 1881. This village is rather east of Barrington than of Warren, and situated on Palmer river, the source of Warren river. These neighboring towns of Massachusetts undoubtedly owed their infection to Barrington. But whence came the infection of Barrington?

It is in answer to this question that we must return to Connecticut again and trace the march of intermittent fever from the month of the Connecticut river upward into Massachusetts. Malarial fever had skirmished about the shores of Long Island Sound some years before it began to ascend this river. It had already invaded the

Housatonic neighborhood, and advanced as far as Salisbury and North Canaan and other towns near the northern boundary of Connecticut, but did not from those points enter Massachusetts. Meanwhile it had spread through the former State east and west of the Housatonic river, and west of the Connecticut before it made for the Massachusetts line. In 1872 it appeared at Hartford, in 1876 at Winsor and Enfield, and entered Massachusetts at Agawam and Long Meadow in 1878, but at Sheffield by the Housatonic river in 1877. It was in Worcester County, Mass., in 1879 at Douglass, near the Rhode Island line in 1880; then in 1879 and 1880 in Bristol and Plymouth counties, and in Taunton, the town nearest to Barrington, in 1879 and 1880. The Rhode Island towns of Woonsocket and North Smithfield seem to have had a sprinkling of cases of intermittent fever about 1880, according to the report of Dr. Jenckes, who practiced in the former town, which were probably derived from the wave which reached Douglass, Mass., in 1880. But this part of our State was chiefly infected by the Rhode Island branch of the intermittent stream.

Now, Taunton is sixteen miles distant in a bee line from Nayatt Brick Yards, in Barrington, one of the great centres of the malarious disease. Westerly is over four times that distance from the same place, nearly eight miles of which is over two large arms of Narragansett Bay; while Shannocks Mills are about twenty-four miles off. The shortest distance between Barrington and the main-land, so to speak, is between Nayatt and Conimicut Points—hardly over a mile. Had the wave of intermittent fever been in Warwick in 1880 there might have been some good reason for supposing that Barrington had been invaded from that point. But instead of that the disease was nearly thirty miles away when malaria broke out at the Nayatt Brick Yards. We have then only this course left us to adopt, namely, that the disease "jumped" from Taunton to Barrington, by way either of Palmer or Barrington river and the Hundred Acre Cove which forms the head waters of Barrington river. We are still more confirmed in this view for two reasons. First there was no appearance of the disease between Woonsocket and Barrington until 1881. Then, as we said above, through the reports of Drs. Wellington and Merchant, in 1882 and 1883 the Massachusetts towns east and northeast of Barrington, as far as Dighton, were invaded by the disease; thus showing it was working backward to the places it had jumped, a feature peculiar to this erratic affection. If we connect these points with lines we shall be able to see that Barrington was a centre from which malaria radiated back into Massachusetts and to the north and south in Rhode Island, namely, East Providence, Warren and Bristol. The Massachusetts line will connect Barrington with North Swansea, Swansea, Somerset as far as Dighton. These jumps have been noticed as peculiar to this epidemic while in Connecticut. Thus, as was seen above, there was no appearance of the disease between the Thames river and Westerly until 1882, two years after it left that river and entered Rhode Island. Such skips have been noticed in the disease while in Massachusetts.[1]

The only course left us, then, is to regard that the outbreak of the disease in Barrington in 1880 was a portion of the aberrant malarious stream coming from Massachusetts in 1880, or the year previous. Had the disease jumped from Charlestown to North Kingstown, where a case or two were reported in 1880, it might have continued its jumps to Barrington and even to Taunton, these skipping-points acting as centres from which the disease might spread to the various places which it had at first left unaffected. But this very plausible theory disappears when we find that we can place no dependence upon the statement that North Kingstown had a case of non-imported malarial fever. For the epidemic passed step by step through the various towns, and its whole course may be traced. The towns which it first skipped were only affected a year after its invasion of Westerly; and the nearest point to Barrington it had up to that time then reached was a year after its outbreak in the latter place. Accordingly the presumptuous evidence is, that malarial disease entered Barrington from Massachusetts by way of Taunton, the nearest and most direct point of invasion.

PRESENT CONDITION OF MALARIA.

I have only space left for a brief summary. In another part a detailed report of the present state of intermittent fever in the different towns of the State is given.

Bristol County.—Here the disease is evidently on the wane. Small and moderate prevalence is reported.

Kent County.—Malaria does not seem to have as yet advanced far to the west. Large prevalence is reported for the eastern districts, little or none for the western. West Greenwich has thus far wholly escaped, if we except imported cases. The disease in 1885 reached Coventry Centre; but it has always showed a preference for the eastern line of the town and broken out there to the largest degree. A tributary of the Pawtuxet river enters Coventry near the centre of the infection.

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[1] Report of Conn. State Board of Health, 1885, pp. 188-189.

Providence County.—To the north and east it has increased rather than lessened ; to the west diminished or disappeared. Foster and Glocester report none but imported cases. Scituate's cases, however, have increased in number. If we make the Mashapaug district the centre of an ellipse and let its circumference pass through Cranston, Johnston, Smithfield, Lincoln, Pawtucket, East Providence and Warwick, we shall find the greatest prevalence of the disease confined to the circumference except in North Providence and Smithfield, where malaria is not so rife. North of this ellipse it is very prevalent. In Providence city it is confined almost wholly to the west and northwest. Burrillville is a new town invaded.

Washington County.—Here malaria is rapidly disappearing, small prevalence being reported in the majority of towns, and none in Exeter. The towns on the western borders of the State have thus far wholly, or almost wholly, escaped infection. This is a still further proof of the indisposition of this disease to travel westward unless under unusually favorable circumstances. Another fact well worthy of mention is, that Newport county has entirely, thus far, escaped, for only imported cases have been as yet reported.

In order to study the travels of intermittent fever in our State more satisfactorily a Tabular Statement has been carefully prepared to show the first appearance of the disease in each town, and, as far as possible, the part first infected, and then its onward march from point to point. It is, unfortunately, but an approximation of what I would desire, but the best I could make under the circumstances. Had I been able to obtain satisfactory data, showing at what point the disease entered and left each town in the State, the result would have been of much greater value. But some idea, it is hoped, may be obtained of the worth of such a report by the attempt here made.

Summary.—Intermittent fever is not a disease indigenous to Rhode Island or to New England generally. It is periodic in its movements, possessing a migratory character, similar to what is seen in sudden appearances of army-worms, canker-worms or locusts, in localities which had for years been exempt from them. The cause of its excursions is at present unknown, but the line of advance is in a northeasterly direction; and unless the most favorable conditions are present malaria prefers no other course. Its spread west and south is very slow; a view instanced in the present outbreak, as the western border of Rhode Island has not been thus far reached even where the streams extend over the western line of the State into Connecticut. Another feature of the disease is its "jumps" or "skips." It will pass suddenly over a region, gradually working back to its point of departure, and perhaps requiring a larger number of years than in reaching the more distant point. From ancient times to the present drainage and cultivation have not only checked its spread but in many instances eradicated it altogether. Even the slight attempts made in this direction have in later times resulted in great relief. Accordingly the study of intermittent fever in the localities whence it spreads thus periodically through New England, must needs throw much light on this perplexing and erratic epidemic.

For all the theories thus far advanced in regard to its nature and the cause of its spread are no longer warranted by the facts. But that there is some connection between the disease and swamps and stagnant pools has been too often noticed to be regarded as merely coincidental. Beyond this we must not venture to go.

In concluding I would say, that it has been my intention throughout to avoid stating the manifold theories of others relative to intermittent fever, or to build up a theory of my own, but to present all the facts now known, and then coming within the limits of a brief essay. Some of these facts are now for the first time published, and may, it is hoped, not only awaken interest in an affection which has taxed the skill both of the theorist and investigator, but, in some measure, conduce to its further study by presenting side by side the different observations thus far known of its various epidemics in Rhode Island.

CORRECTIONS.

Page 111 eight lines from bottom expunge the second *incidentally*.
" 112 fifteen " " top for *faithful* read *fruitful*.
" 113 fifteen " " top for *theories* read *the ones*.
" 117 seven " " top for *have* read *has*.
" 122 five " " bottom for *had* read *have*.
" 125 fourteen " " top after *fostered* read *perhaps*.
" 126 five " " top after *Centreville* and *Crompton* read *in 1882;* after *Pontiac*, etc., to *Natick* and *Old Warwick* retain *1881*.

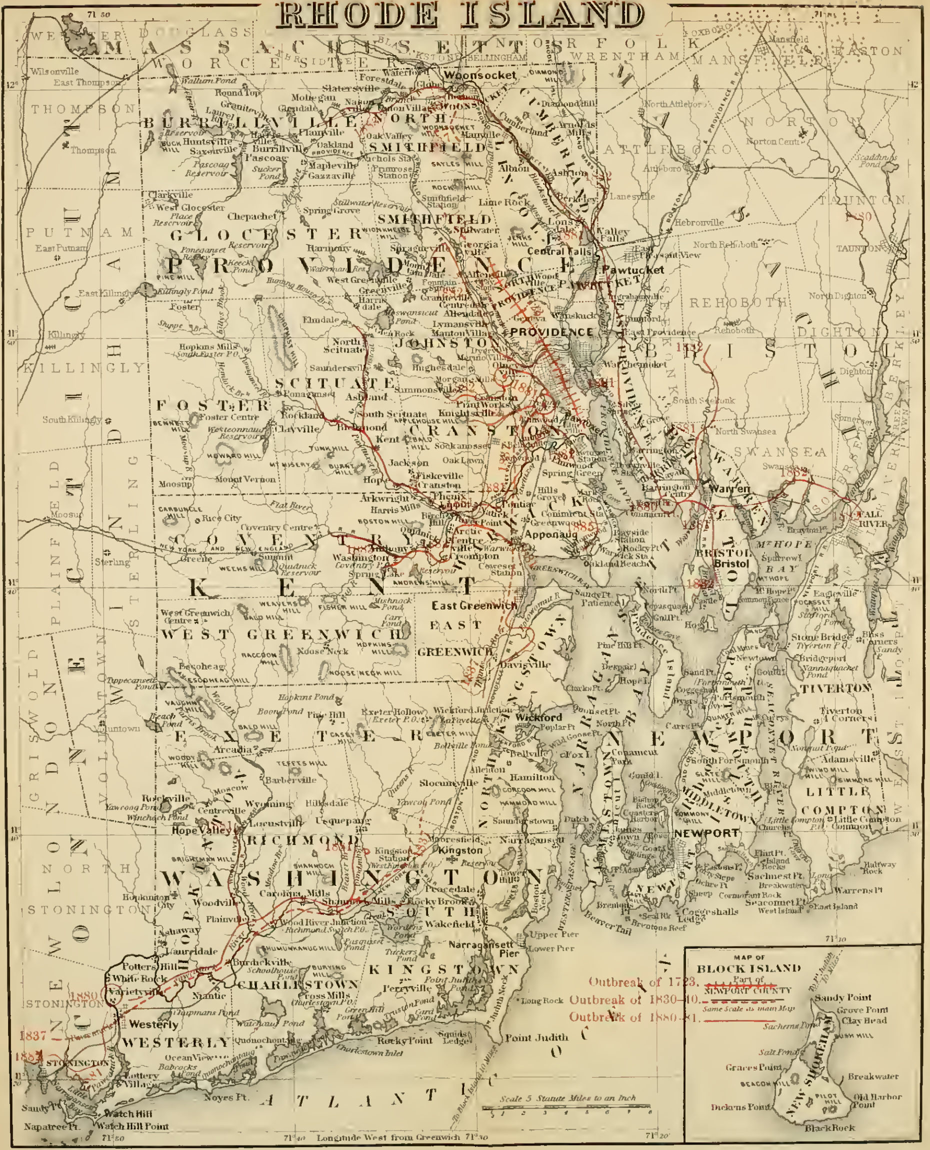
INTERMITTENT FEVER IN RHODE ISLAND.

TOWNS.	DEGREE OF PREVALENCE.	TOWNS AND PLACES OF FIRST APPEARANCE.						
	1886.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
BRISTOL CO.								
Barrington	Moderate	Nayatt.	East Barring'on					
Bristol	Small			Centre				
Warren	Moderate		Centre	North				
KENT CO.								
Coventry	Large in Eastern part				Quidnick	Washington	Centre.	
East Greenwich	Small	Two cases? Hunt's river	Village					
West Greenwich	None							
Warwick	Large all over the town		Apponaug, Phenix, Natick, et al.	Centreville, Crompton, et al.				Bayside.
NEWPORT CO.	No indigenous Malaria in Newport County at any time							
PROVIDENCE CO. TOWNS.								
Burrillville	Very light		Imported only					Nasonville.
Cranston	Large all through the town		Spectacle pond	Pawtuxet, Arlington	Print Works			
Cumberland	Large in the Southern and Western borders		Valley Falls	Ashton				
East Providence	Large, West and North parts		Riverside, Watchemoket	Rumford				
Foster	Small. Imported							

INTERMITTENT FEVER IN RHODE ISLAND.

TOWNS.	DEGREE OF PREVALENCE.	TOWNS AND PLACES OF FIRST APPEARANCE.						
	1886.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Glocester.	Small. Imported							
Johnston.	Large. Eastern and Southern borders		Silver Lake	Olneyville	Neutakonkanut.	Simmonsville		
Lincoln.	Large, Eastern district.		Central Falls.	Manville.				
North Providence.	Average, Western border.				Centredale.	Woodville.		
North Smithfield.	Large, Northern part.				Forestdale.			
Pawtucket.	Very prevalent all over the city.		Centre of city.					
Scituate.	Rather large, Central and Eastern.			Fiskeville.	Hope.	No. Scituate.		
Smithfield.	Moderate, Eastern			Georgiaville.				
Woonsocket.	Large. All over town			Centre.				
PROVIDENCE CITY.	Moderate. All over the city. Large in north-western section.	3 or 4 cases? Mashapaug.	S. W. Border.	Olneyville.				
WASHINGTON CO.								
Charlestown.	Very small.		Shannock Mills.					
Exeter.	None reported.		S. E. Border?					
Hopkinton.	Very small.		Pawcatuck river.					
North Kingstown.	Small. Imported							
South Kingstown.	Very small.						North Border.	Worden's Pond.
Richmond.	Scarcely any.		Pawcatuck river.					
Westerly	Moderate Western border.	Centre.						

TRAVELS OF INTERMITTENT FEVER IN RHODE ISLAND



EXTRACTS

FROM A PAPER READ BEFORE THE R. I. MEDICAL SOCIETY, ON

THE ANTICIPATORY TREATMENT OF LOCAL EPIDEMICS,

BY

HORATIO R. STORER, A. M., M. D.,

OF NEWPORT.

THE ANTICIPATORY TREATMENT OF LOCAL EPIDEMICS.

You will pardon me, gentlemen, if in the very practical remarks that I am about to make, I shall seem to be almost insulting science by begging that it may be more frequently allied with plain and simple common sense. In what way, I shall explain. That prevention is better than cure, though axiomatic, has been acknowledged by our profession virtually only within the last twenty-five years; and even now, coinciding as we really all do in the dogmata that conservative surgery is far more creditable and implies a higher skill than destructive surgery, and that prevention of illness is a more beneficent work, often requiring indeed more strictly scientific attainments, than attempting, so often in vain, its cure. - - - - - - - - - - -

The popular ignorance of which I have spoken but few practitioners have the courage, or more properly speaking can afford, to persistently withstand, save by withdrawing themselves, very seriously and solemnly, within the shell of professional dignity; and particularly does this seem the case in Rhode Island. It is not necessary to refer to the instances almost innumerable, of fractures and luxations that in this State are placed under irregular practice, and to the unfortunate results, of which I, though a comparatively new comer among you, have myself seen so many illustrations, that I do not hesitate to say that I doubt if another city exists in this country where, with the same population, there are as many cripples as in Newport. Lame myself, I daily find more than enough with whom to sympathize. Aside from this, however, there obtains a peculiar and almost laughable apathy, slowness of comprehension, inertness, disinclination to progress, call it what you will except by the misnomer "conservatism," so often wrongfully applied to it by local pride, which in professional matters must often have evidenced itself, upon the part of their clients and townspeople, to every gentleman present. I have lived in other communities, and can therefore fairly draw comparisons; I speak besides in the moderate language of one who has left his youth behind him, and I frankly say that the study of the peculiarity of which I am speaking has added a constant interest and fascination to my now nearly nine years of Rhode Island life. - -

Such being the case, and deliberate little Rhode Island, as a State, having been almost as slow in throwing its weight in favor of protecting the public health, as it was in joining the Federal Union, you who are natives of her soil will excuse my warmth when I urge you, as a society, to greater, more intelligent and more conjoined efforts to guard your patients' families and your own against outbreaks or the extension of preventable disease. You have a State Board of Health, composed in the main of unexceptional material, but it is, as its chairman, my colleague at the Newport Hospital and friend, Dr. Turner, has repeatedly impressed upon me, without the necessary power. You have in Providence, as we still have in Newport to a great extent, your public health controlled by city officials who are unprofessional persons, and therefore, however well meaning they may be, to this extent unfit and incompetent for such a responsible, and so strictly medical a trust. Superintendents of Health may be admirable in their way, City Registrars may be the most conscientious and assiduous of men, Secretaries of State Boards may be masters of sanitation, far sighted, skilled in statecraft, the very men for the place; but what can Dr. Chapin, or Dr. Snow, or Dr. Fisher accomplish, in comparison with what still remains to be done, unless they are backed by public intelligence in these matters, and unless they have confided to them sufficient authority to enforce their own decrees, or those that have been made in accordance with their advice by the State or civic legislative bodies. The medical profession may be of one mind, as they now practically are, as regards preventing and controlling zymotic disease, but unless they have secured the attention, the belief and co-operation of the great public, whose lives it is their own life study to prolong, they can effect, and they do effect, very little indeed in the way of increasing vital expectation, and of throwing out from the mortuary list certain constant series of premature deaths which are at once a menace to every community and a disgrace to those that are highly civilized.

There occur yearly, almost monthly, in Rhode Island, local epidemics of zymotic disease, slight perhaps in comparison with those of a century ago, but still, as I have said, discreditable in view of what is known concerning the origin of such maladies, their methods of progression, and the means by which they might be not merely arrested but prevented. At one time it may be typhoid, I will not say in Providence; at another, scarlet fever, in Newport for instance; at a third, diphtheria, as a year or two ago, and again very recently, in Middletown and Portsmouth, and, I regret to say, domiciled there at this very moment, if not indeed also in the city of Newport.

It is bad practice, I think, not necessarily upon the part of local medical attendants, but decidedly so upon that of the State, that these preventable diseases, for such in very great measure they are, should ever be allowed to gain a foothold, no matter whether in city, town or village. The first case may be unavoidable, but having come, whether through disease germs wafted by the wind, conveyed by water, or brought by personal importation from abroad, it is like the flying and flaming cinder that may strike upon dry roof or hay-rick, which it is the duty of each person, whether seemingly directly concerned or not, to use his every effort, individually and in concert with others, to arrest and extinguish.

Now there are difficulties, and very grave difficulties, often confronting the family attendant, should he endeavor to use his best judgment, to the very uttermost detail thereof, whether in treating an individual case of infectious or contagious disease, or in endeavoring to protect the remainder of the family, the neighbors or the community, and it is from repeated personal knowledge and observation of these difficulties, especially in connection with my duties as one of the officers of the Sanitary Protection Association of Newport, and from having had charge myself of two of the at least six fatal cases of diphtheria that have just occurred in that city, that I have thought that this brief communication upon the Anticipatory Treatment of Local Epidemics might not only be of interest to you, but perhaps, also of some actual service.

We have found, decidedly, that no matter what the knowledge, skill, public spirit or good will of the attending physician, he requires in these cases to have behind him the moral support of the law; and this in turn is but the reflection of public opinion. Where contagious and infectious disease has appeared, there is necessary, for the protection of others, a strict local quarantine, or removal to isolation house or hospital. This removal applies not only to the patient but to his immediate family, for at times it is not only cruel but sanitarily useless to separate them. There is required more or less expenditure for disinfectants, often thought needless by ignorant or parsimonious persons; and in addition, frequently the destruction of property, such as bedding and the like, that has become infected. To carry out these rules is not only at times beyond the power of any mere physician, but even to advise them simply, may occasion the loss of his most valuable patronage, perhaps indeed the main source of his support.

In these cases a competent and properly selected official, for obvious reasons better to be designated by the State than by the city or town that he may be called upon to serve, may often in a single day save to the community in the lives preserved, a money value of productive labor, else sacrificed, far surpassing, perhaps many times over, the most generous annual salary that he may receive. Look for instance at last year's epidemic at Plymouth, Pa., so much like the water-course from which it derived the fatal germs that gave it birth. At the outset, it resembled the single little isolated spring. As it went on and on, it increased in volume and in force, until it became the overwhelming torrent which decimated a prosperous community, and by its ravages put it back, in comparison with what it would have become in wealth and influence, a full score of years. Who can doubt that if at the Plymouth outbreak a skilled sanitary detective, preferable by far to the wisest assembly of experienced practising physicians, had been earlier set to work, the appalling result would have been averted. The first case or two might have been perplexing, but the very moment, after inspection of their local conditions and surroundings, and if you please analysis of the drinking waters, had taken place, the next step, that of synthesis, had been made, that moment the mystery would have been solved. A hundred dollars, thus intelligently expended, would have saved hundreds of thousands, to say nothing of the frightful loss of life. If, as is so easy in these local epidemics, whether comparatively slight or severe, effects that are similar to each other can be traced to a common origin, he is simply an empiric, and no physician, who will not, by endeavoring to remove or destroy the cause, tend to arrest its consequences.

I have implied that I believe very fully that it is the business of the State, in health matters, to protect its people, and I have declared that it is my conviction that the State health officials should be directed to investigate into, and should be expected to cut short, every local epidemic of zymotic disease that may be reported to it as existing within the borders of Rhode Island. It is well enough, it is indeed very necessary, that there should be local health officers and local boards of health. The beneficial effects of the latter were never in any place made more manifest than they have been in the city of

Newport during the last year, and there never was prepared a more convincing Annual Report than that presented on the second of the present month by its secretary, Dr. Rives.

The experience of that city, however, has shown that even were the executive powers of the Board all that they should be, and as yet they are very far from this, they would still be insufficient to cover very important ground. Take, for example, the present occurrence of diphtheria at Middletown, Portsmouth and Newport, during which there have been at least a dozen deaths. - - - - - - - - - -

[*A full account of the invasion and progress of diphtheria in the aforementioned localities, and the mortality therefrom was here given.*]

Now who can reach such an evil as this that I have demonstrated, the unchecked and by ordinary measures uncontrollable progress of one of the most fatal of all diseases, so directly, so promptly, and so effectively as our friend, Dr. Fisher, Secretary of the State Board of Health whose well-directed energy we in Newport had occasion to utilize, by bringing him personally upon the ground, for inspection of the plague spots of the city, at the very commencement of the Board of Health campaign, the existence, extent and great danger of every one of which have been officially verified in the first annual report of the new Board of Health, now on file at the City Hall. He would be able to enter upon the scene, as soon as information should reach him of a local epidemic, in the name of the law. He would know precisely what to look for, what to do at the moment, and what orders to give for the future. He would bring to the task that independence of local and obstructive influence pertaining to his official position and authority, and he would be besides, as a skilled expert, at once judge, jury and executive, just what is required in such an emergency, where loss of time is most dangerous. It seems to me that there can be no subject more worthy the attention of this society, no action that it could take of more service to the community, than for it to appoint a suitable committee to draft a memorial to the Assembly at the present session requesting it to enlarge the powers of the State Board of Health in the direction that I have indicated, and to appropriate the small additional sum that might annually be necessary to make them effective; said committee to be directed to attend to their duty at once, so that the statute may be passed during the brief period that remains before the adjournment of the Assembly.

I have purposely refrained from consideration of the various technical measures that are of avail towards the prevention and arrest of epidemics, always interesting as such a discussion would prove, especially when, as here, intelligent men convene from both city and country, believing as I do that something beyond this is indicated. You already possess the necessary means, the machinery, for the anticipatory and for the direct treatment of local epidemics, namely, the State Board of Health. That machinery is already in motion, though as yet hesitatingly and imperfectly, if never indeed jarringly. It merely requires more power, both behind it and within itself, and more oil to lubricate it; in other words, an annual appropriation sufficient to enable its executive officer to travel, as often and as freely as may be necessary, to the successive foci of zymotic disease.

I have addressed you, gentlemen, as again an active practitioner, and not merely the meditative recluse that my invalidism forced me for a time to be; as one of the profession of Newport, a city which requires, if she is ever to become the health resort for which nature has so well fitted her, the assistance of the State towards protecting her from, and removing every form of preventable disease; and as now a member of this State Society. I may add, may I not, in this city of Roger Williams, that I have also spoken as one of the long line of Massachusetts men who, whether from stress of religious or political, or as in my own case, of climatic asperity, have come out from our old home on the shore of Massachusetts Bay, to find a new one upon Narragansett, where with freedom of conscience, and equal rights shall I say, we may with our families, as becomes true Rhode Islanders, hope for a ripe old age, such as Newport traditions would give to us all, unabbreviated by either general or local epidemic disease.

The Society will permit me to offer the following motion, and I urge its passage:

That a committee of three be appointed by the chair to immediately memorialize the Assembly, upon behalf of this Society, requesting it to authorize the State Board of Health to personally investigate and restrain, through its Secretary, local outbreaks of zymotic disease, including cholera, yellow fever, small-pox, diphtheria, scarlet fever, typhus and malignant typhoid, as they may occur within the State; and to appropriate for such additional service during the ensuing year a sum not to exceed five hundred dollars.

[As a matter of history it may be stated that the motion prevailed "*nem. con.*" and the chair appointed as such dommittee, Drs. H. R. Storer, E. M. Snow and G. T. Swarts. At a subsequent meeting of the Society Dr. Storer, Chairman of the Committee, reported as follows:]

"The committee, consisting of Drs. Snow, Swarts and Storer, to whom was entrusted the duty of memorializing the State Assembly in behalf of the Society, for a special appropriation to enable the State Board of Health to more effectively attempt to suppress local epidemics of zymotic disease, would report that they have attended to the duty assigned to them. The memorial was presented through Gov. Wetmore, received the favorable consideration of the conjoined committee upon the public health, and passed the Senate at the Providence session without delay. In the House it was referred to the finance committee, by whom a hearing was given your committee at Newport during the present week. Especial thanks are due to Drs. Winsor of Anthony, Garvin of Lonsdale, and other medical gentlemen in the Assembly, for the very ready and cordial aid with which they furthered the wishes of the Society. Just previous to final adjournment of the Assembly, by advice of the finance committee, further consideration of the bill was indefinitely postponed."

CONFERENCE OF STATE AND PROVINCIAL BOARDS OF HEALTH.

Having been appointed to represent the State Board of Health of Rhode Island in the National Conference of the State Boards of Health, held at Toronto, Canada, Oct. 4–8, 1886, the Secretary made the following report.

The Conference was called to order Oct. 4, at 9 o'clock A. M., Dr. J. N. McCormack, President, in the chair, Dr. G. P. Conn, Secretary. Upon roll-call forty-four delegates responded from twenty-six States and Provinces.

After some preliminary discussion as to methods of procedure and the adoption of definite rules therefor, the Chairman called for the reading of the first paper upon the programme of the Conference.

A COMPARATIVE VIEW OF SANITARY LAWS.

This paper, prepared by Dr. A. G. Young, Secretary of the State Board of Health of Maine, was excellent in design, and considering the limited time for preparation and means of obtaining and verifying the various kinds of information sought for, and comparing the same during that time, was worthy of much commendation.

The following extracts from that paper in relation to the powers of the different State Boards of Health will be of interest :

STATE BOARDS OF HEALTH.

A marked difference exists in various State or central boards of health in regard to their powers and duties. The role of some of them, as defined by the legislative acts establishing them, would appear to be hardly more than educational and advisory. Examples of such boards with restricted executive powers are those of Maine, Rhode Island, Connecticut, Indiana and Michigan. Some of these, notwithstanding their limited jurisdiction, have done excellent sanitary work.

To other boards their legislatures have delegated a certain share of law-making power, thereby, under certain circumstances, or in certain emergencies, increasing their effectiveness and usefulness. The law of Illinois defining the powers of the board says that it "shall have authority to make such rules and regulations and such sanitary investigations as they may, from time to time deem necessary for the preservation or improvement of public health; and it shall be the duty of all police officers, sheriffs, constables and all other officers and employés of the State, to enforce such rules and regulations."

"Under this section, says the Attorney-General, broad duties devolve upon the State Board of Health, and ample power is given to enable them to discharge their duties. They not only have the right, but it is their duty, to make any and all rules and regulations which they deem necessary to preserve the public health. Such rules and regulations, when promulgated, have the force and authority of law, and are to be enforced, if necessary, by the entire power of the State."

The same powers are given to the Iowa Board in the same words, and by a recent enactment similar powers have been granted to the New Hampshire Board. In Arkansas, "At any time the Governor of the State may require the State Board of Health to examine into nuisances or questions affecting the security of life and health in any locality, and in such case the said Board shall have all necessary powers to make examinations, and shall report the result thereof to the Governor." In accordance with the report of the Board the Governor may declare the matter or thing under consideration a nuisance, and is granted the necessary powers to have it changed, abated or removed. New York, in 1882, adopted the same as an amendment to her law.

In England the powers and duties of the local government board are various.

It acts in many cases as a board of appeal; the by-laws of the local authorities must be submitted to it for approval; it may from time to time make, alter or revoke regulations for the prevention of contagious diseases; it may require any two or more local authorities to act together, or for various purposes may form two or more districts into a united district, or may unite two or more districts for the purpose of appointing a medical officer of health; it may by provisional order, dissolve any local government district or merge it into some other urban or rural district; it may invest a rural authority with the powers of an urban authority; it may order and compel the local authority to undertake and contract to clean the streets, and remove and dispose of garbage; it may, when a local authority is in default in performing its duty, make an order and enforce it by writ of mandamus if necessary, or appoint an agent to do the duty.

Some of our American State and provincial legislatures have done well in drawing freely from some of the better parts of the English law. Minnesota and Ontario have adopted, with slight changes, the following from the English law. "Whenever any part of England appears to be threatened with or is affected by any formidable epidemic, endemic or infectious disease, the local government board may make, and from time to time alter and revoke regulations for all or any of the following purposes; (namely:)

"(1) For the speedy interment of the dead; and

"(2.) For house to house visitation; and

"(3.) For the provision of medical aid and accommodation, for the promotion of cleansing, ventilation and disinfection, and for guarding against the spread of disease."

Among other commendable points in some of the laws establishing American boards may be mentioned the power, as far as it may be conferred by State legislative authority, of inspecting, and, if necessary, detaining steamboats, railway trains and other conveyances when necessitated by the existence of contagious diseases, as in Ontario, West Virginia and New Jersey ; of appointing sanitary police as in Ontario ; of appointing inspectors and assigning them "to such duties as the interests of the public health in any part of the State may require," as in New Jersey ; of ordering "nuisances, or the cause of any special disease or mortality, to be abated and removed," as in Pennsylvania ; the appropriation of an epidemic or emergency fund, as in New Hampshire, Connecticut, New Jersey, Maryland, Minnesota and Illinois ; the giving to the State Board local jurisdiction co-ordinate with the powers of the local Board when infectious diseases exist, as in Massachusetts; and the investing of the State Board with the powers of Justices, in making examinations, as in Minnesota and Ontario.

After the reading of the paper and a discussion of the points presented, a committee was appointed to report a codification of the health laws of the several States and Provinces at the next meeting of the Conference.

Interesting and important questions for consideration were then presented by delegates from different States and Provinces, and pertinent and animated discussions ensued thereon.

Among them may be mentioned resolutions in relation to the transportation of the bodies of the dead, the deaths occurring from certain infectious and contagious diseases ; and after extended discussion the whole subject was referred to a committee consisting of Drs. Benjamin Lee of Pennsylvania, Charles H. Fisher of Rhode Island, and Samuel W. Abbott of Massachusetts. At a subsequent meeting the adoption of the amended resolutions was further postponed.

Questions followed : "In relation to vaccine culture ;" "Organization of town and county boards of health ;" "Upon what basis may State boards enforce acts to regulate medical practice ?" "How is the co-operation of the medical profession and the general public best secured in preventing the spread of diphtheria, scarlet fever and other infectious diseases ?"

Upon the last named question Dr. Baker of Michigan presented tabular statements which were designed to show that for a period of eight years subsequent to the commencement of the circulation of a document giving detailed information relative to the restriction and prevention of scarlet fever, the mortality from that disease had been lessened about 25 per cent. He attributed the lessened mortality, and, as a corollary, the doubtless lessened number of cases, in a considerable measure due to the information given in said document. Small-pox had also been restricted during the same period in a larger degree, *i. e.*, about 67 per cent., as shown by tabular statistics.

Among the pertinent suggestions presented in Dr. Baker's paper, was the following:

> "One of the best methods of securing the co-operation of the general public is the popular sanitary convention. Here scientific nomenclature is cast aside, and the truths of science are clothed with the language of the people. Here statistics become charged with the enthusiasm of the speaker, the inattentive become attentive, and the blind begin to see. Two or three such conventions are held in Michigan every year. At times very large audiences attend They command a large amount of space in the local papers and in the daily press of the State, and after the convention 2,000 copies of the proceedings are printed and distributed among those people likely to read them. Papers have been read before these conventions by many of the most prominent ministers, lawyers, professors and doctors of the State."

The question of compensation of local health officers was considered. In no State had the statutes fixed the per diem at less than two dollars for village and township supervision, and for larger populations a correspondingly larger compensation. For the larger city and State boards, from $2,000 to $3,000 was paid, according as the time of the officer was more or less occupied.

Upon the subject of the "Investigation of the causes of disease. How can State Boards of Health secure the best results?" the following, taken from brief reports of the proceedings of the Conference, will indicate the drift of the discussion.

"Dr. C. H. Fisher, of Rhode Island, opened the discussion. After alluding to the obscurity surrounding the etiology of many forms of disease, the more definite methods of modern times employed in the investigation of disease, and especially in the departments of biology and pathology, and the partial neglect of the knowledge which might be obtained by the practical observations of intelligent physicians, he closed by saying that the question to be considered by the Conference was the advisability of planning some method of utilizing the great mass of material that might be obtained through the physicians of the various States. He thought the subject should be taken into consideration by a committee during the year and a report made at the next meeting of the Conference. If it seemed advisable, they might report plans and methods of procedure, even, perhaps, to the circulars of inquiry, the questions to be submitted and the manner of recording the facts. He thought that by distributing proper circulars and blanks to the great mass of physicians they would be able to return a great deal of valuable information upon some one line of inquiry. At any rate it would be of advantage to the physicians in inducing them to observe and record their observations, and by this means there would be an advance in the qualifications of those engaged in the work. From the circulars distributed facts could be recorded and returned to the board, and the facts thus presented could be classified and some really logical conclusions might be drawn therefrom.

Dr. Henry B. Baker, Secretary State Board of Health of Michigan, said : "Elsewhere and heretofore, sickness statistics, for a long period of time, have only been obtained for a few communicable diseases, with regard to which compulsory notification is enforced ; but we now have established, in the State of Michigan, a system which enables us to have reliable statistics of sickness from all the important diseases. The system is based upon the law of averages,—which makes it probable that one hundred or more physicians in active general practice in different parts of the State will, on the average, see an average of the several diseases which ordinarily occur ; and those are the diseases which cause most sickness and most deaths, and consequently are the diseases which it is most important to study, with the view to learning the manner of their causation. The reports concerning sickness published by the Michigan State Board of Health show the relative prevalence of sickness from each important disease, in each month, and in each year, and from each disease compared with other diseases ; they thus show the relative danger from each disease compared with other diseases, and compared with the same disease in other years, or in other months in the same year. These statistics are based on the actual observation of physicians in different parts of the State." He also suggested, "that for the purpose of learning the causes of diseases, sickness statistics are more valuable than statistics of deaths," and he submitted the present methods of inquiry in Michigan by postal card blanks, giving weekly reports by representative physicians of all sickness under their observation.

Dr. Wm. H. Cretcher, President State Board of Health of Ohio, suggested that there was no better way of getting at the facts relating to the cause of disease, than by the system adopted by the British Medical Association. They issued a circular and distributed it through their journal to all their subscribers, some 12,000, the questions to be answered by the individual according to his own experience and observation. He thought the point well taken that if scientifically carried out, great benefit could be derived from this manner of investigating disease. One subject at a time he considered sufficient to be reported from. There should be a committee appointed at this meeting to carefully codify questions pertaining to particular diseases. The answers should be in accordance with actual observations and not theoretical.

Dr. Fisher fully agreed with the last speaker, that nothing but facts were wanted, without theories or opinions. He moved that a committee of five be appointed by the Conference to devise a plan for obtaining facts from the physicians in the several States through the State Boards of Health, and that the Committee report at the next annual meeting of the Conference.

Dr. Fisher's motion was put and carried, and the following committee appointed :

Dr. Charles H. Fisher, Secretary State Board of Health, Rhode Island.

Dr. S. W. Abbott, Secretary State Board of Health, Massachusetts.

Dr. Benjamin Lee, Secretary State Board of Health, Pennsylvania.

Dr. P. H. Bryce, Secretary Provincial Board of Health, Toronto, Ontario.

Dr. G. B. Thornton, member State Board of Health, Tennessee.

Dr. McCormick, Chairman of the Conference and Secretary State Board of Health of Kentucky, submitted the following question : "3. How much in regard to preventive medicine can be taught in public schools of low grade, and what is the best method of such teaching ?"

Dr. J. Berrien Lindsley, Secretary State Board of Health of Tennessee, said for many years he had been connected with the school system of his city and State. The school house in the United States in the nineteenth century is what the church was to Europe in earlier times, the sign and source of civilization. The great body of children in the United States stopped with the schools of the lower grade. In traveling over different sections of the country he had observed the uneducated handling the engine and making use of steam although they had no knowledge of the subject of latent heat. He saw the application of the most wonderful discoveries by people of very little education. People suffer from a violation of sanitary laws, and a knowledge of these subjects should be systematically taught. In order to teach the children in the lower grade of schools, those ten or twelve years of age, the teaching must be dogmatic and practical. The question was ably discussed by Drs. J. E. Reeves, P. H. Bryce and J. N. McCormick. No definite action was taken thereon.

The subject of inter-state notification in contagious and infectious diseases, introduced by Dr. P. H. Bryce with an interesting paper, was taken up.

Dr. Joseph Holt, President State Board of Health of Louisiana, said that the question of inter-state notification of disease, theoretically, seemed to be one which disposes of itself. Small-pox breaks out ; under a system of inter-state notification you tell your neighbors and that settles the question. Yellow fever breaks out ; inter-state notification—and the question was settled. But in practice when we are obliged to announce the appearance of a pestilential disease by the notification of the neighbors, it becomes a vastly more difficult problem. The question involved, first the local outbreak of the disease ; the extension of the alarm : the commercial disturbance of the locality, neighboring communities and States. It involves the play of human passion, terror in its most abject form, and avarice in the most hideous aspect in which it can be presented. You have to deal with men who place personal gain before the saving of thousands of lives. The next question to be considered are the remedies to be applied. He believed in letting the people know the extent of the danger because by so doing the alarm would be commensurate with the danger. By such a course people would not be frightened beyond the actual limit of the danger. It was hidden danger that paralyzed. He thought that State authorities should recognize the question in all its bearings, and should formulate plans to govern the relation of one State authority to another on this subject. States should have confidence in each other, and upon the outbreak of yellow fever or small-pox their movements should be decisive and determined. He considered the matter of vital importance, as suggesting the most effectual method of arresting the spread of pestilential diseases from the Maritime Provinces to the interior, and concluded by submitting a series of resolutions for adoption by the Conference.

The resolutions elicited remarks at considerable length by various members of the Conference, and were then adopted. They are as follows :

INTER-STATE NOTIFICATION IN INFECTIOUS AND CONTAGIOUS DISEASES.

The following are the resolutions, adopted by the International Conference of Boards of Health, at Toronto, October 6th, 1886.

(*Also presented to and adopted by the American Public Health Association, Oct 8th,* 1886.)

WHEREAS, It is necessary for the protection and preservation of the public health that prompt information should be given of the existence of cholera, yellow fever and small pox; be it

1. *Resolved,* That it is the sense of the National Conference of State Boards of Health, that it is the duty of each State, Provincial and Local Board of Health in any locality in which said diseases, may at any time occur, to furnish immediately information of the existence of such disease to boards of health of neighboring and provincial states and to the local board in such states as have no state board.

2. *Resolved,* That upon rumor or report of the existence of pestilential disease, and positive definite information thereon not being obtainable from the proper health authorities, this Conference recommends that the health officials of one state shall be privileged and justified to go into another state for the purpose of investigating and establishing the truth or falsity of such reports.

3. *Resolved,* That whenever practicable, the investigations made under the preceding section shall be done with the co-operation of the state or local health authorities.

4. *Resolved,* That any case which presents symptoms seriously suspicious of one of the aforenamed diseases, shall be treated as suspicions, and reported as provided for in cases announced as actual.

5. *Resolved,* That any case respecting which reputable and experienced physicians disagree as to whether the disease is or is not pestilential, shall be reported as suspicious.

6. *Resolved,* That any case respecting which efforts are made to conceal its existence, full history and true nature shall be deemed suspicious and so acted upon.

7. *Resolved,* That in accordance with the provisions of the foregoing resolutions the Boards of Health of the United States and Canada represented at this Conference do pledge themselves to an interchange of information as herein provided.

The subject of blank forms for a uniform system of vital statistics was referred to a committee of which Dr. H. B. Baker was chairman, with instructions to report at the next meeting of the Conference.

Dr. Baker introduced the following resolution :

"*Resolved*, That it now seems probable that progress can be made in the restriction of that disease, which in this country causes more deaths than any other disease, namely: consumption, by declaring to the people that care should be taken to destroy or disinfect the sputa from persons suffering from pulmonary consumption."

In opening the discussion, Dr. Baker said that he had prepared, but would not take the time of the Conference to read, memoranda of recent literature on the subject, embracing examples of direct infection by tubercule, and other considerations tending to show the importance of the disinfection of tuberculous matter. He assumed that all present were familiar with the literature of the subject, and so would proceed to practical questions which we must consider. As a reminder of the importance of consumption as a cause of death, he exhibited a diagram (page 119, report of the Rhode Island State Board of Health, 1885) of the comparative mortality from fifteen most important causes of death in Rhode Island during the twenty-five years—1860–1884 inclusive,—showing that the deaths from consumption in that State were more than twice as many as from the next most important cause of death. The question before us was, he thought, whether we were all agreed that consumption can probably be lessened by efforts in this direction. If we are, the sooner the work begins the better; but if we are not, perhaps more harm than good will result by one or more State Boards of Health teaching the people to make such efforts. If the majority of those who control the State Boards of Health are skeptical, and will not support a movement in this direction, then we must delay action; but if the Conference is strong in the belief that something can be done for the prevention of this most important of all diseases, then his view was that the work for its prevention should immediately begin. If the resolution shall be adopted, a practical question then is, "How shall we disinfect?" Dr. Baker read from a letter received from Dr. George M. Sternberg, as follows:

"I an decidedly in favor of the adoption of the resolution introduced by you at the last meeting of the Conference of State Boards of Health.

"I consider the oxidizing disinfectants the most useful for the purpose indicated, inasmuch as they destroy the albuminous material in which the bacilli are imbedded and thus permit the disinfecting agent, if present in sufficient quantity, to act directly upon the bacilli and insure their destruction.

"Labarraque's solution, or a solution of chloride of lime, used in sufficient quantity to completely dissolve and destroy by oxidization the sputa and the contained bacilli, seem to me to be the most useful agents for this purpose. So far as cheapness and efficient action are concerned we can scarcely ask for anything better than a solution of chloride of lime containing eight ounces to the gallon of water."

The subject was discussed by Drs. Plunkett, Lee, and Hibberd, and the resolution was unanimously adopted.

Dr. C. N. Metcalf, Secretary State Board of Health of Indiana, read an interesting paper upon the plumbing of the new capitol of Indiana, with a series of questions following, having a general as well as special application.

The whole was referred to a committee which reported at a subsequent meeting. The report was in accordance with the general principles of sanitary plumbing, and closed with the following statement:

> We commend the action of the State Board of Health of Indiana in its endeavors to bring about a correction of the errors so manifest in the principles that appear to have guided the plumbing of their new State House, and upon its insistence that the plumbing of its State buildings should always conform to and keep pace with the advances made in sanitary science.

The following officers were elected for the ensuing year:

President, J. N. McCormick, M. D., of Kentucky.
Secretary and Treasurer, G. P. Conn, M. D., of New Hampshire.

The Conference was in session four days, to the mutual profit of all concerned.

ADDITIONS TO THE LIBRARY.

BOOK EXCHANGES, 1886.

Mass.	Seventh Annual Report of the State Board of Health (Lunacy and Charity)	1885
Conn.	Eighth Annual Report of the State Board of Health	1885
N. Y.	Fifth Annual Report of the State Board of Health	1885
N. J.	Ninth Annual Report of the State Board of Health	1885
N. H.	Fifth Annual Report of the State Board of Health	1885
S. C.	Seventh Annual Report of the State Board of Health	1885–6
Tenn.	Second Annual Report of the State Board of Health	1880–4
W. Virg.	Fourth Annual Report of the State Board of Health	1885–6
Mich.	Thirteenth Annual Report of the State Board of Health	1885
Ind.	Fourth Annual Report of the State Board of Health	1884
Ill.	Eighth Annual Report of the State Board of Health	1885
Wis.	Ninth Report of the State Board of Health	1885
Iowa.	Third Biennial Report of the State Board of Health	1883–5
Min.	Eleventh Annual Report of the State Board of Health	1885
Cal.	Eighth Annual Report of the State Board of Health	1883
Can.	Fourth Annual Report of the Provincial Board of Health, Ont.	1885
D. C.	Annual Report of Health Officer	1885
Kans.	First Annual Report of the State Board of Health	1885
D. C.	Annual Report of the National Board of Health	1885
Md.	Sixth Biennial Report of the State Board of Health	1885–6
La.	Biennial Report of the State Board of Health	1884–5
Del.	Third Annual Report of the State Board of Health	1885
Penn.	First Annual Report of the State Board of Health	1885
N. C.	Biennial Report of the State Board of Health	1885–6
Maine.	First Annual Report of the State Board of Health	1885
U. S.	Proceedings of National Conference of State Boards of Health	1885
Germany.	Statistical Report Imp	1861–84

Ohio.	State Sanitary Assoc. Report	1886
Ill.	Official Register of Physicians and Midwives	1886
Kan.	Laws of, In relation to Public Health	1886
Md.	Trans. 88th Annual Session of the State Medical Society	1886
D. C.	Annual Report Supervising Surgeon General Marine Hospital Service	1885
D. C.	Circulars of Marine Hospital Service	1886
Iowa.	First Registration Report	1883
N. Y.	Disinfection of Rags. Health Officer, New York City	1885
U. S.	Disinfection of Rags. Report Am. Public Health Assoc	1886
Can.	Quarantine System of Prov. Ontario	1886
Mass.	Report of Drainage Commission on the Valleys of Mystic, Blackstone et al. river	1886
R. I.	Review of above Report—Geo. E. Waring, Jr	1886
Mich.	Ventilation. J. M. Hull, M. D	
Ind.	Removal from the air of infectious particles—Dr. David Prince	1886
Mich.	Proceedings of Sanitary Conventions at Howell, Kalamazoo, Coldwater and Big Rapids	1886
Tenn.	Public Water Supply, Memphis	1886
La.	Sanitary Protection of New Orleans—Dr. J. Holt	1886
Ind.	Laws and Sanitary regulations, State Board of Health	1886
N. Y.	Report, Trustees of State Library	1886
Mich.	Trans. State Medical Society	1886
Md.	Laws relating to public health	1886
N. H.	Transactions of State Med. Soc	1885
Mass.	Forty-fourth Registration Report	1885
N. H.	Fifth Registration Report	1884
Italy.	Movements of the population, Births, Deaths, etc	1885
Italy.	Vital Statistics, International	1865–83
Germany.	Vital Statistics, Imperial, Berlin	1885
Austria.	Vital Statistics, Buda—Pesth	1884
Ireland.	Vital Statistics, Report of Registrar General	1884
N. H.	Trans. State Medical Society, 96th Session, G. P. Conn., Sec	1886
Oregon.	Trans. State Medical Society, 13th Annual Meeting	1886
Ind.	Report Madison County Board of Health	1885
Iowa.	Report State Librarian, Mrs. S. B. Maxwell	1886
R. I.	Manual of State Officers, Institutions, &c	1886–87
R. I.	City Manual, Providence	1887
R. I.	Report Commissioner of Public Schools	1886

PAMPHLETS, CIRCULARS, ETC., FROM AUTHORS.

Geo E. Waring, Jr. C. E. ; Newport, R. I.
Joseph Holt, M. D. Pres. La. State Board of Health.
Nathan Allen, M. D., Board of Health, Lowell, Mass.
Laws of Maternity, Normal Standard of Physiology, et al.
Harvey Reed, M. D., Sec. Ohio San. Assoc. Ohio.
Geo. M. Sternberg, Pres. Am. Public Health Association, Washington, D. C.

REPORTS OF SUPERINTENDENTS, AND BOARDS OF HEALTH ; VITAL STATISTICS OF CITIES, &C.

Providence, R. I.; Berlin, Germany, Buda-Pesth, Hungary; Rome, Italy; Dublin, Ireland; Utica, N. Y.; Atlanta, Ga.; Brooklyn, N. Y.; Coventry, Eng.; New Haven, Conn.; Boston, Mass.. Richmond. Va.; Memphis, Tenn.; Hudson County, N. J.: St. Paul, Minn.; Cincinnati, Ohio; Charleston, S. C.; Nashville, Tenn.; Baltimore, Md.; St. Louis, Mo.; Wilmington, Del.; Washington, D. C.; New Orleans, La.; Lansing, Mich.; Manchester, N. H.; Newark, N. J., Salem, Mass,; Prov. Ontario, Can.; Reading, Pa.; Paterson, N. J.; Augusta, Ga.

REPORTS OF INSTITUTIONS, CONVENTIONS, SOCIETIES, BUREAUX, ETC.

Butler Hospital, Atheneum, Public Library, Historical Society, R. I. Medical Society, Brown University, City Manual, Bureau of Education, D. C., National Plumbers Association.

CIRCULARS, MONTHLY BULLETINS, QUARTERLY REPORTS, ETC.

From the State Boards of Health of Maine, New Hampshire, Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Maryland, District Columbia, North Carolina, South Carolina, Louisiana, Tennessee, Kentucky, Michigan, Ohio, Wisconsin, Iowa, Illinois, Indiana, Missouri, Kansas, Minnesota, and the Ohio State Sanitary Association, National Association of Master Plumbers, etc.

PERIODICAL EXCHANGES.

The Sanitary News	Chicago, Ill.
The Sanitarian	New York, N. Y.
The North Carolina Medical Journal	Wilmington, N. C.
The Sanitary Engineer	New York, N. Y.
The Popular Science News	Boston, Mass.
The Medical Bulletin	Philadelphia, Pa.
The Medical Register	" "
The College and Clinical Record	" "
The Therapeutic Gazette	Detroit, Mich.
The American Lancet	" "
The New York Medical Abstract	New York, N. Y.
The Medical Chronicle	Baltimore, Md.
The Decorators' Gazette and Plumber	London, Eng.
The American Veterinary Review	New York, N. Y.
The Polyclinic	Philadelphia, Pa.
The Manufacturer and Builder	New York, N. Y.
The Analyst	" "
The New England Medical Gazette	Boston, Mass.
The Annals of Hygiene	Philadelphia, Pa.
The Medical World	Philadelphia, Pa.
The Journal of Reconstructives	New York, N. Y.
Building, The Journal of Architecture	" "
The Journal of the American Medical Assoc	Philadelphia, Pa.
The Sanitary Era	New York.

HEALTH OFFICERS OF RHODE ISLAND, 1886.

BARRINGTON —The Town Council.

BRISTOL.—Lyman B. Bosworth.

WARREN.—Alexander G. Sanford.

COVENTRY.—David W. R. Bennett.

EAST GREENWICH.—James H. Edredge, M. D.

WEST GREENWICH.—The Town Council.

WARWICK.—Doctors A. G. Sprague and D. O. King.

JAMESTOWN —The Town Council.

LITTLE COMPTON.—The Town Council.

MIDDLETOWN.—Nathaniel L. Champlin.

NEW SHOREHAM.—The Town Council.

PORTSMOUTH.—The Town Council.

TIVERTON.—P. D. Humphrey, S. E. Borden, Christ. Manchester.

NEWPORT CITY.—*Board of Health:* C. F. Barker, M. D., Pres.; W. C. Rives, Jr., M. D., Sec.; Henry E. Turner, M. D, City Physician; W, F. Townsend, Health Officer at Quarantine; W. H. Bliss and C. H Langley, Inspectors.

BURRILLVILLE.—George O. Fairfield.

CRANSTON.—F. W. Bradbury, M. D.

CUMBERLAND.—Dr. Thomas W. Hague, Ernest L. Jencks.

EAST PROVIDENCE.—Simeon Hunt, M. D.

FOSTER.—Henry Arnold, M. D.

GLOCESTER.—Geo. A. Harris, M. D.

JOHNSTON.—Doctors E. B. Eddy, E. T. Fiske, T. C. Lawton, C. A. Barnard, E. F. Hamburg and W. A. Carroll, Esq.

LINCOLN.—Samuel L. Pendergrass.

NORTH PROVIDENCE.—Sanford E. Kinnicum.

NORTH SMITHFIELD.—Joshua Wardle.

PAWTUCKET.—Geo. H. Stanley, M. D.; S. S. Tompkins.

SCITUATE.—Walter J. Smith, M. D.

Smithfield.—W. A. Medbury, Esq.

Woonsocket.—A. M. Paine, M. D.

Providence City.—C. V. Chapin, M. D , Supt. of Health; G. T. Swarts, M D., Inspector.

Charlestown.—The Town Council.

Exeter.—The Town Council.

Hopkinton —The Town Council.

North Kingstown.—S. O. Myers, M. D.

South Kingstown.—John R. Wilcox, Esq.

Richmond.—A. H. Eccleston, M. D.

Westerly.—H. M. Rose, M. D., Supt. of Health; Benj. York, Esq.

MEDICAL CORRESPONDENTS, R. I.

1886.

Dr. B Arnold,
“ E. G. Carpenter,
“ G L. Church,
“ E. P. Clark.
“ A H. Eccleston,
“ J. H. Eldredge,
“ R P. Eddy,
“ G R. Fisher,
“ F. B. Fuller,
“ C. H. Hadley,
“ G. B. Haines,
“ G. A. Harris,
Dr. G. D. Hersey,
“ S. Hunt,
“ G W. Jenckes,
“ Dan. O. King,
“ M. J. E. Legris,
“ A. A. Mann,
“ C. E. Maryott,
“ J. H. Morgan,
“ J. E. Perry,
“ A. Potter,
“ F. T. Rogers,
“ H. W. Rose,
Dr. T. H. Shipman.
“ A. G. Sprague,
“ F. B. Smith.
“ W. J. Smith,
“ G. H. Stanley,
“ H. S. Swan,
“ P K. Taylor,
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THIRTY-THIRD REPORT

UPON THE

Births, Marriages and Deaths,

IN THE

STATE OF RHODE ISLAND,

FOR THE

YEAR ENDING DECEMBER 31, 1885.

PREPARED BY

CHARLES H. FISHER, M. D.,
STATE REGISTRAR OF VITAL STATISTICS; SECRETARY OF THE STATE BOARD OF HEALTH.

PROVIDENCE:
E. L. FREEMAN & SON, STATE PRINTERS.
1886.

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SAMUEL M. GRAY, C. E.	Providence	Providence Co.
CHARLES H. FISHER, M. D., *ex-officio and Secretary*	"	" "

State of Rhode Island and Providence Plantations.

Office of the State Registrar of Vital Statistics,

Providence, December, 1886.

To the Honorable the General Assembly:

The Thirty-Third Annual Report upon the Births, Marriages and Deaths in Rhode Island is herewith respectfully submitted. The statistics presented are for the year ending December 31, 1885.

Recourse has been had to an increased number of Tables, in order to exhibit more fully the results of registration in 1885, and also for various years and periods of years since 1852. A larger number of summaries and diagrams are also made available, in the presentation of facts derived from the returns for 1885, and of previous years.

It has been the intention to present the important facts of many years of registration, as well as of single years, in such manner as to make them readily apparent, and relieve the reader of the statistics, of much of the labor of personal examination of the general Tables, for the purpose of ascertaining the relation the various facts bear to each other. Several important diseases have been given unusual attention, and more especially that of pulmonary consumption.

The general results of vital registration, in 1885, are as follows:

BIRTHS.

SEX.		PARENTAGE.	
Males	3,591	American	3,497
Females	3,437	Foreign	3,531

Whole number of births 7,028

MARRIAGES.

American Groom and Bride	1,374
Foreign-born Groom and Bride	677
American Groom and Foreign Bride	236
Foreign Groom and American Bride	201
Whole number of marriages	2,488

DEATHS.

SEX.		PARENTAGE.	
Males	2,607	American	2,765
Females	2,782	Foreign	2,624

Whole number of deaths 5,389

There was one birth to every 43.3 of the population, or ..... 23.1 births in every 1,000.

One person married in every 61.1 of the population, or ..... 16 3 persons married in every 1,000.

And one death in every 56.4 of the population, or ..... 17.7 deaths in every 1,000.

A few general statistics in relation to the vital movements of the population of the State, for a period of several years, may be of interest, and not inappropriate in this connection.

The following summary will show the rates, per 1,000 of the population, of births, marriages and deaths, for six years :

	1880.	1881.	1882.	1883.	1884.	1885.
Birth rates	22.8	24.4	24.7	24.4	23.9	23.1
Death rates	17.5	18.1	18.3	18.1	17.1	17.7
Excess of Birth rates over Death rates	5.3	6.3	6.4	6.3	6.8	5.4
Marriage rates	20.0	19.8	19.1	18.5	17.2	16.3

It will be seen by the above summary that, while the birth rate has fluctuated in some measure from year to year, the variations have been small in degree, the difference of extremes during the six years having been less than two in every one thousand of the population.

The extremes of difference in the death rates have been even less than in the birth rates, that is, one and two-tenths in every one thousand of the population.

But the regular diminution of the marriage rates have been so decided and are so obvious, that they invite particular consideration. The difference of three and seven-tenths in every one thousand of the population, between the marriage rates of 1880 and 1885, shows a diminution, in proportion to the rate of 1880, of nearly twenty per cent.

The number of marriages in 1885 were about ninety per cent. of the number in 1880, a loss of ten per cent. in number, while the population from June, 1880, to June, 1885, had increased ten per cent. in number.

The number of living births, during the five years 1881–1885, was 33,652, the number of deaths, during the same period, was 25,902. The excess of births over the deaths was 7,750.

The increase of the population of the State, during that period, was 27,753, an increase of ten per cent.; while the increase by the excess of births over the deaths was two and eight-tenths per cent., leaving seven and two tenths per cent. of the increase of population, or 20,000 persons, to be added to the population of the State by immigration, during the period of five years.

With great respect,

CHAS. H. FISHER,

State Registrar.

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REPORT UPON THE REGISTRATION

OF

BIRTHS, MARRIAGES AND DEATHS

IN

RHODE ISLAND,

FOR THE

YEAR ENDING DECEMBER 31, 1885,

AND

FOR VARIOUS PERIODS FROM 1853 TO 1885 INCLUSIVE.

TABLE I.

GENERAL ABSTRACT OF BIRTHS, MARRIAGES AND DEATHS,

IN THE STATE OF RHODE ISLAND DURING THE YEAR

1885.

TOWNS AND DIVISIONS OF THE STATE.	Population, 1885.	BIRTHS, 1885.							MARRIAGES, 1885.					DEATHS, 1885.												
			SEX.		PARENTAGE.					NATIVITY.					SEX.		PARENTAGE.		Ages Given.		Aggregate Age in yrs.		Average Age in years.			
		Whole Number.	Males.	Females.	American.	Foreign.	Am. Father. For. Mother.	For. Father. Am. Mother.	Whole Number.	American.	Foreign.	Am. Groom. For. Bride.	For. Groom. Am. Bride.	Whole Number.	Males.	Females.	American.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.	Aggregate Age in years of all.	Average Age in years of all.
Barrington	1,394	27	15	12	19	5	2	1	7	7	....	....	....	17	9	8	12	5	9	8	513	326	57.00	40.75	839	49.35
Bristol	5.737	111	67	44	53	40	6	12	32	22	5	3	2	98	60	38	65	33	60	38	2.649	1,485	44 15	39.08	4,134	42.18
Warren	4,209	71	37	34	30	34	6	1	30	11	16	2	1	70	31	39	31	39	31	39	1,512	1,310	48.80	33 60	2,822	40.32
BRISTOL COUNTY	11,340	209	119	90	102	79	14	14	69	40	21	5	3	185	100	85	108	77	100	85	4,674	3,121	46.74	36.71	7,795	42.14
Coventry	4,806	72	39	33	32	33	4	3	31	26	....	2	3	72	36	36	65	7	36	36	1,118	1,729	31.06	48.00	2,847	39 54
East Greenwich	2,659	71	33	38	41	17	8	5	26	21	4	1	....	72	34	38	47	25	33	38	1,065	1,578	32.30	41.26	2,643	37.22
West Greenwich	863	23	14	9	21	1	1	....	2	2	....	....	....	12	4	8	12	....	4	8	221	497	55.25	62.12	718	59.75
Warwick	13.286	286	148	138	121	121	14	30	109	58	38	6	7	199	93	106	115	84	93	106	2,916	3,188	31.35	30.07	6,104	30.69
KENT COUNTY	21,614	452	234	218	215	172	27	38	168	107	42	9	10	355	167	188	239	116	166	188	5,320	6,992	32.05	37.20	12,312	34.78
Jamestown	516	9	6	3	8	1	....	....	....	....	....	....	....	8	3	5	6	2	3	5	168	121	56.00	24.50	289	36.12
Little Compton	1,055	15	7	8	13	2	....	....	15	12	2	1	....	16	8	8	15	1	7	8	408	421	58.30	52.62	829	55.26
Middletown	1,166	14	6	8	11	3	....	....	2	2	....	....	....	17	8	9	16	1	8	9	333	505	41.62	56 00	838	49 20
New Shoreham	1,267	25	16	9	25	....	....	....	6	6	....	....	....	28	15	13	28	....	14	9	716	361	51.14	40.11	1,077	45 90
Portsmouth	2,008	27	15	12	20	5	2	....	7	6	1	....	....	32	14	18	29	3	13	17	747	1,023	57.46	60.17	1,770	59.00
Tiverton	2,702	68	32	36	28	27	8	5	13	10	1	2	....	43	20	23	31	12	20	23	857	999	42.85	43.43	1,856	43.16
TOWNS, NEWPORT CO.	8,714	158	82	76	105	38	10	5	43	36	4	3	....	144	68	76	125	19	65	71	3,229	3,430	49.67	48.31	6,659	48.99
NEWPORT CITY	19,566	529	258	271	218	195	62	54	147	83	40	16	8	267	127	140	152	115	127	140	5,082	6,377	40.01	45.55	11,459	42.92

TOWNS AND DIVISIONS OF THE STATE.	Population, 1885.	BIRTHS, 1885.							MARRIAGES, 1885.					DEATHS, 1885.												
			SEX.		PARENTAGE.					NATIVITY.					SEX.		PARENTAGE.		Ages Given.		Aggregate Age in yrs.		Average Age in years.			
		Whole Number.	Males.	Females.	American.	Foreign.	Am. Father. For. Mother.	For Father. Am. Mother.	Whole Number.	American.	Foreign.	Am. Groom. For. Bride.	For. Groom. Am. Bride.	Whole Number.	Males.	Females.	American.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.	Aggregate Age in years of all.	Average Age in years of all.
Burrillville	5,126	93	44	49	35	43	3	12	31	14	14	3	....	75	38	37	42	33	38	37	1,253	1,369	33.00	37 00	2,622	35.00
Cranston	*6,005	129	72	57	66	42	12	9	26	23	1	1	1	104	49	55	69	35	48	55	1,832	2,685	38.17	48.82	4,517	43 85
State Inst's, Cranston.	....	....	.....	.....	.....	.....	....	....	.....	.....	.....	....	....	106	56	50	36	70	52	49	2,368	1,986	46 31	40 53	4,351	43.11
Cumberland	7,163	200	104	96	52	108	20	20	58	20	28	5	5	176	93	83	51	125	93	83	2,640	1,898	28 39	22.87	4,538	26 00
East Providence	6,816	157	80	77	82	55	10	10	39	27	8	2	2	113	61	52	73	40	61	51	1,677	1,677	27 50	32.90	3,354	30.00
Foster	1,397	16	9	7	15	.....	1	....	16	15	.....	1	....	29	14	15	29	......	14	15	817	602	58 35	40.13	1,419	48 90
Glocester	1,922	47	25	22	27	14	3	3	13	12	.....	1	....	30	13	17	26	4	13	17	758	712	58.30	41.88	1,470	49 00
Johnston	7,274	167	91	76	73	65	15	14	35	23	8	2	2	91	38	53	71	20	38	52	1,069	1,705	28 13	32.75	2,774	30.82
Lincoln	17,229	381	182	199	64	237	35	45	105	30	49	16	10	335	153	182	70	265	153	181	3,072	4,490	20.08	24 80	7,562	22 64
North Providence	1,478	23	13	10	16	5	2	....	5	3	1	1	....	19	13	6	11	8	13	6	442	173	31.00	28 83	615	32.37
North Smithfield	3,077	61	33	28	18	33	4	6	13	6	5	2	...	35	20	15	20	15	20	15	1,020	728	51 00	48.53	1,748	50.00
Pawtucket	22,906	530	262	268	188	207	62	73	254	134	66	30	24	434	202	232	184	250	201	232	6,822	8,159	33.94	35.12	14,981	34.60
Scituate	3,606	67	36	31	52	8	2	5	32	24	....	4	4	78	38	40	72	6	38	40	1,376	1,888	36.21	47 20	3,264	41.84
Smithfield	2,338	36	16	20	21	13	1	1	17	8	6	1	2	32	13	19	21	11	13	19	567	945	43 61	49.21	1,508	46 20
Woonsocket	16,199	414	221	193	72	279	25	38	147	57	60	15	15	304	139	165	88	216	139	165	3,239	5,273	23 30	31.96	8,512	28.00
TOWNS, PROV. CO.	102,536	2,321	1,188	1,133	781	1,109	195	236	791	396	246	84	65	1,961	940	1,021	863	1,098	934	1,017	28,952	34,290	31.00	33.72	63,242	32.41
PROVIDENCE CITY	118,070	2,936	1,494	1,442	1,198	1,185	249	304	1,091	560	310	109	112	2,164	1,052	1,112	1,012	1,152	1,052	1,112	33,315	37,685	30.17	33.89	71,000	32 81
Charlestown	1,042	10	4	6	10	.....	...	....	9	8	.....	1	....	18	9	9	17	1	9	9	498	427	55.33	47.41	925	51.16
Exeter	1,086	13	8	5	13	.....	.....	....	9	9	......	...	....	19	10	9	19	......	10	9	437	639	43.70	71.00	1,076	56.63
Hopkinton	2,796	50	28	22	42	2	3	3	22	22	.....	....	....	37	20	17	36	1	20	17	965	830	48 25	48.82	1,795	48.51
North Kingstown	3,894	70	33	37	52	8	4	6	20	19	.....	1	....	52	27	25	41	8	27	25	1,100	1,075	40.78	43 00	2,175	41 83
South Kingstown	5,549	104	50	54	89	4	9	2	47	43	2	1	1	70	38	32	63	7	38	31	1,792	1,770	47.16	57.10	3,562	51.62
Richmond	1,744	42	18	24	32	7	1	2	9	8	1	....	....	23	13	10	22	1	12	10	726	357	60.50	35.70	1,083	49.23
Westerly	6,333	134	75	59	62	59	4	9	63	43	11	7	2	94	36	58	65	29	36	58	941	1,693	26 77	29.20	2,637	28 05
WASHINGTON CO.	22,444	423	216	207	300	80	21	22	179	152	14	10	3	313	153	160	266	47	152	159	6,462	6,791	42.52	42.71	13,253	42.61
COUNTIES.																										
Bristol	11,340	209	119	90	102	79	14	14	69	40	21	5	3	185	100	85	108	77	100	85	4,674	3,121	46 74	36.71	7,795	42 14
Kent	21,614	452	234	218	215	172	27	38	168	107	42	9	10	355	167	188	239	116	166	188	5,320	6,992	32 05	37.20	12,312	34.78
Newport	28,280	687	340	347	323	233	72	59	190	119	44	19	8	411	195	216	277	134	192	211	8,311	9,807	43 28	46 18	18,118	44.96
Providence	220,606	5,257	2,682	2,575	1,979	2,294	441	540	1,882	956	556	193	177	4,125	1,992	2,133	1,875	2,250	1,986	2,129	62,267	71,975	31.35	33 81	134,242	32 62
Washington	22,444	423	216	207	300	80	21	22	179	152	14	10	3	313	153	160	266	47	152	159	6,462	6,791	42 52	42.71	13,253	42 61
WHOLE STATE	304,284	7,028	3,591	3,437	2,919	2,858	578	673	2,488	1,374	677	236	201	5,389	2,607	2,782	2,765	2,624	2,596	2,772	87,034	98,686	33.53	35 60	185,720	34.59

* Including 1,280 in State Institutions.

TABLE II.—BIRTHS, 1885.

Arranged by Months, Sexes and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.						
			Bristol County.	Kent County.	Newport County, Towns.	Newport City.	Providence County, Towns.	Providence City.	Washington County.
January....	Males ...	300	12	19	11	29	94	111	24
	Females..	271	5	10	12	36	87	107	14
	Total....	571	17	29	23	65	181	218	38
February...	Males....	285	6	16	3	25	105	105	25
	Females..	251	6	17	2	20	82	107	17
	Total....	536	12	33	5	45	187	212	42
March	Males....	300	9	13	9	19	93	140	17
	Females..	262	4	15	2	17	101	113	10
	Total....	562	13	28	11	36	194	253	27
April	Males....	267	10	27	3	14	77	120	16
	Females..	279	7	19	7	19	86	118	23
	Total....	546	17	46	10	33	163	238	39
May	Males....	314	9	23	9	14	108	128	23
	Females..	272	10	24	5	19	84	119	11
	Total....	586	19	47	14	33	192	247	34
June.......	Males....	317	8	24	9	23	90	144	19
	Females..	287	6	16	8	19	92	129	17
	Total....	604	14	40	17	42	182	273	36
July.......	Males....	272	12	17	4	16	107	103	13
	Females..	287	10	18	5	13	97	121	23
	Total....	559	22	35	9	29	204	224	36

Table II.—BIRTHS, 1885.—Continued.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.						
			Bristol County.	Kent County.	Newport County, Towns.	Newport City.	Providence County, Towns.	Providence City.	Washington County.
August.....	Males....	292	15	18	5	14	99	132	9
	Females..	311	11	16	7	25	105	126	21
	Total....	603	26	34	12	39	204	258	30
September..	Males....	313	13	23	6	25	104	125	17
	Females..	293	10	24	6	18	96	124	15
	Total....	606	23	47	12	43	200	249	32
October	Males....	280	3	15	6	21	96	121	18
	Females..	281	7	19	10	25	84	120	16
	Total....	561	10	34	16	46	180	241	34
November..	Males....	322	6	24	4	34	105	129	20
	Females..	299	7	14	6	27	106	123	16
	Total....	621	13	38	10	61	211	252	36
December ..	Males....	329	16	15	13	24	110	136	15
	Females..	344	7	26	6	33	113	135	24
	Total....	673	23	41	19	57	223	271	39
Whole Year.	Males....	3,591	119	234	82	258	1,188	1,494	216
	Females..	3,437	90	218	76	271	1,133	1,442	207
	Total....	7,028	209	452	158	529	2,321	2,936	423

TABLE III.—PLURALITY BIRTHS, 1885.

ARRANGED BY MONTHS AND DIVISIONS OF THE STATE, AND SHOWING THE NATIVITY OF THE PARENTS.

MONTHS.	Number of Cases.	SEX.	Number of Children.	DIVISIONS OF THE STATE.							NATIVITY OF THE PARENTS.																					
				Bristol County.	Kent County.	Newport County, Towns.	Newport City.	Providence Co., Towns.	Providence City.	Washington Co.	American.	English.	French.	Italian.	Irish.	Polish.	Scotch.	Swedish.	Welsh.	American Father. English Mother.	American Father. French Mother.	American Father. Irish Mother.	American Father. Cape Breton Mo.	English Father. Amer. Mother.	English Father, Nova Scotia Mo.	French Father. Amer. Mother.	Irish Father. Amer. Mother.	Irish Father. English Mother.	Italian Father. French Mother.	Nova Scotia Fa. Irish Mother.	Prussian Father. Amer. Mother.	Swedish Father. Amer. Mother.
January...	8	Males.... 2 Females..14	16	...	...	1	2	3	2	...	5	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...
February..	4	Males.... 7 Females.. 1	8	...	1	...	1	1	1	...	2	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
March	4	Males.... 3 Females.. 5	8	...	...	...	...	1	2	1	1	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...
April.....	6	Males.... 6 Females.. 6	12	...	...	...	...	...	6	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...
May......	7	Males....13 Females.. 1	14	...	1	...	2	2	2	...	3	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...
June.....	8	Males....10 Females.. 6	16	...	2	...	...	1	5	...	2	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	2	...	1	...	...	1
July......	3	Males.... 5 Females.. 1	6	...	...	...	...	2	1	...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
August ...	8	Males.... 6 Females .10	16	...	2	...	1	2	3	...	3	...	1	...	2	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...
September.	8	Males .... 6 Females..10	16	...	...	...	...	6	1	1	4	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...
October...	*6	Males.... 8 Females.. 6	14	...	...	...	...	1	4	1	2	...	...	1	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
November.	5	Males.... 8 Females.. 2	10	...	2	...	...	3	...	...	2	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December .	3	Males.... 3 Females.. 3	6	...	...	...	1	...	1	1	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whole year	70	Males ...77 Females..65	142	...	8	1	7	22	28	4	27	2	3	2	10	1	2	2	1	1	1	3	1	1	1	3	4	1	1	1	1	1

* One case of quadruplets, in Providence city, of foreign parents. All males.

TABLE IV—MARRIAGES, 1885.

Arranged by Months and Divisions of the State.

MONTHS.	Whole State, 1885.	DIVISIONS OF THE STATE.							Whole State, 1884.
		Bristol County.	Kent County.	Newport County, Towns.	Newport City.	Providence County, Towns.	Providence City.	Washington County.	
January	207	4	13	2	14	73	88	13	234
February	165	2	8	1	15	55	77	7	215
March..........	122	1	8	2	10	49	40	12	134
First Quarter....	494	7	29	5	39	177	205	32	583
April...........	225	6	11	4	14	69	113	8	227
May............	172	3	15	4	11	49	80	10	196
June...........	209	5	19	1	10	56	106	12	246
Second Quarter..	605	14	45	9	35	174	299	30	669
July..........	153	3	15	3	3	55	61	13	173
August.........	187	6	14	2	13	70	76	6	178
September	236	8	18	4	21	69	97	19	223
Third Quarter...	576	17	47	9	37	194	234	38	574
October.........	285	13	16	7	14	86	120	29	249
November	299	12	15	6	10	93	136	27	291
December.......	228	6	16	7	12	67	97	23	192
Fourth Quarter..	811	31	47	20	36	246	353	79	732
Whole Year.....	2,488	69	168	43	147	791	1,091	179	2,558

TABLE V.—AGES OF PERSONS MARRIED, 1885.

AGES OF MEN.	AGES OF WOMEN.													Whole Number of Grooms.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	Not Stated.	
Under 20	42	23	...	....	....	..	..	..	..	..	..	..	..	65
20 to 25	209	558	82	10	3	..	..	..	..	..	..	..	1	863
25 to 30	95	357	257	37	5	1	..	..	..	..	..	..	..	752
30 to 35	21	112	120	51	19	6	2	..	..	..	..	..	..	331
35 to 40	4	36	51	49	42	6	..	..	..	..	..	..	1	189
40 to 45	1	19	18	30	21	13	3	1	..	..	..	..	..	106
45 to 50	1	4	10	11	11	16	10	1	1	..	..	..	..	65
50 to 55	....	....	3	10	7	9	8	2	1	1	..	..	..	41
55 to 60	....	1	1	8	5	3	9	4	5	..	..	..	..	36
60 to 65	....	....	....	2	4	2	2	7	2	2	..	..	..	21
65 to 70	....	....	1	1	2	1	3	..	..	3	..	..	..	11
70 to 75	....	....	1	....	1	..	..	..	..	..	..	2	..	4
75 to 80	....	....	....	....	....	..	..	1	..	..	2	..	..	3
80 to 85	...	....	....	....	....	..	..	..	..	..	..	..	..	....
85 to 90	....	....	....	....	....	..	..	..	..	..	..	1	..	1
Not Stated	....	....	....	....	....	..	..	..	..	..	..	..	..	....
Whole No. Brides	373	1110	544	209	120	57	37	16	9	6	2	3	2	2488

TABLE VI.—DEATHS.—1885.

Arranged by Months, Sexes and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.						
			Bristol County.	Kent County.	Newport County, Towns.	Newport City.	Providence County, Towns.	Providence City.	Washington County.
January.....	Males.....	243	9	14	7	11	91	101	10
	Females...	249	6	15	5	12	87	114	10
	Total.....	492	15	29	12	23	178	215	20
February....	Males.....	201	8	18	7	12	71	80	5
	Females...	241	7	13	8	17	101	83	12
	Total.....	442	15	31	15	29	172	163	17
March.......	Males.....	225	13	10	3	11	77	94	17
	Females...	274	7	11	10	20	92	109	25
	Total.....	499	20	21	13	31	169	203	42
April........	Males.....	221	5	9	5	14	78	93	17
	Females...	262	10	23	4	10	91	113	11
	Total.....	483	15	32	9	24	169	206	28
May.........	Males.....	197	9	10	4	10	72	84	8
	Females...	199	8	15	10	13	73	70	10
	Total.....	397	17	25	14	23	145	154	18
June........	Males.....	174	5	10	3	7	59	77	13
	Females...	183	7	9	3	9	64	83	8
	Total.....	357	12	19	6	16	123	160	21
July........	Males.....	291	9	16	4	10	137	108	7
	Females...	296	8	18	3	14	109	133	11
	Total.....	587	17	34	7	24	246	241	18
August......	Males.....	247	9	25	12	15	86	83	17
	Females...	271	12	21	12	12	101	96	17
	Total.....	518	21	46	24	27	187	179	34
September...	Males.....	230	13	14	3	13	84	87	16
	Females...	240	9	20	7	6	96	77	25
	Total.....	470	22	34	10	19	180	164	41
October.....	Males.....	187	4	16	7	9	60	77	14
	Females...	189	2	15	4	11	68	79	10
	Total.....	376	6	31	11	20	128	156	24
November...	Males.....	176	4	9	5	4	63	79	12
	Females...	188	1	14	4	7	66	83	13
	Total.....	364	5	23	9	11	129	162	25
December....	Males.....	215	12	16	8	11	62	89	17
	Females...	189	8	14	5	9	73	72	8
	Total.....	404	20	30	13	20	135	161	25
Whole year..	Males.....	2,607	100	167	68	127	940	1,052	153
	Females...	2,782	85	188	76	140	1,021	1,112	160
	Total.....	5,389	185	355	144	267	1,961	2,164	313

TABLE VII.—DEATHS, 1885.

Exhibiting the Whole Number, the Proportion to Population, the Number of each sex, and the Number in each Period of Life, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Population, 1885.	DEATHS.				Under one year.	1 and under 2.
		Whole Number.	In each 1000 of Populat'n.	Number of each Sex.	SEX.		
Barrington.......	1,394	17	12.2	9	Males.....	2	....
				8	Females . .	2	....
Bristol...........	5,737	98	17.1	60	Males.....	7	2
				38	Females . .	2	1
Warren..........	4,209	70	16.6	31	Males.....	2	2
				39	Females . .	9	2
BRISTOL COUNTY..	11,340	185	16.3	100	Males.....	11	4
				85	Females . .	13	3
Coventry.........	4,806	72	14.1	36	Males.....	6	2
				36	Females . .	1	2
East Greenwich...	2,659	72	27.0	34	Males.....	10	1
				38	Females . .	5	....
West Greenwich ..	863	12	13.9	4	Males.....	1	....
				8	Females . .	....	....
Warwick.........	13,286	199	15.0	93	Males.....	26	7
				106	Females . .	21	2
KENT COUNTY . ..	21,614	355	16.4	167	Males.....	43	10
				188	Females . .	27	4
Jamestown.......	516	8	15.5	3	Males.....	....	....
				5	Females . .	1	1
Little Compton...	1,055	16	15.2	8	Males.....	....	....
				8	Females . .	....	....
Middletown	1,166	17	14.6	8	Males.....	1	....
				9	Females . .	....	....
New Shoreham ...	1,267	28	22.1	15	Males.....	1	2
				13	Females . .	1	....
Portsmouth	2,008	32	15.9	14	Males.....	2	....
				18	Females . .	1	....
Tiverton.........	2,702	43	15.9	20	Males.....	2	1
				23	Females . .	6	1
TOWNS, NEWP'T CO	8,714	144	16.5	68	Males.....	6	3
				76	Females . .	9	2
NEWPORT CITY...	19,566	267	13.6	127	Males.....	30	6
				140	Females . .	19	5

Table VII.—DEATHS, 1885.—Continued.

2 and under 3.	3 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and under 60.	60 and under 70.	70 and under 80.	80 and under 90.	90 and over.	Age not stated.
....	....	....	....	....	....	....	....	....	2	4	1	....	....
....	....	....	....	....	....	2	1	1	....	2	....	....	....
2	2	4	2	2	5	4	2	5	2	15	6	....	....
1	2	3	1	1	2	4	2	2	9	4	3	1	....
...	....	1	2	....	2	1	3	2	7	6	3	....	....
1	1	....	....	2	4	4	2	5	4	2	3	....	....
2	2	5	4	2	7	5	5	7	11	25	10	....	....
2	3	3	1	3	6	10	5	8	13	8	6	1	....
1	3	2	4	1	2	3	....	3	3	4	1	1	....
....	2	1	1	2	3	1	1	4	5	8	6	....	....
2	....	....	1	1	3	2	....	5	1	5	1	1	1
3	3	1	...	3	2	1	3	1	3	8	3	2	....
....	....	....	....	....	....	....	....	....	1	1	1	....	....
...	....	....	....	....	1	1	1	1	....	1	2	1	....
....	5	2	1	4	7	2	4	6	16	9	4	....	....
1	2	4	5	2	14	5	7	3	12	12	13	3	....
3	8	4	6	6	12	7	4	14	21	19	7	2	1
4	7	5	6	7	20	8	12	9	20	29	24	6	....
....	....	....	....	1	....	....	....	....	....	1	1	....	....
....	....	....	....	....	1	1	....	....	1	....	....	....	....
....	....	....	...	....	2	....	....	1	1	1	2	...	1
....	1	....	....	....	2	....	1	....	1	....	3	....	....
....	1	....	....	....	....	1	....	1	3	1	....	...	....
....	....	2	1	....	....	....	....	....	2	4	....	....	....
....	....	....	1	1	...	....	....	1	1	3	4	....	1
1	....	1	....	1	1	....	....	1	1	....	1	1	4
....	....	....	....	....	....	1	1	....	2	6	1	....	1
1	....	1	....	....	...	1	1	2	2	3	3	2	1
1	1	1	1	....	...	....	....	3	4	2	3	1	....
....	....	1	....	....	1	....	3	2	....	5	4	....	....
1	2	1	2	2	2	2	1	6	11	14	11	1	3
2	1	5	1	1	5	2	5	5	7	12	11	3	5
1	1	1	1	5	8	9	6	15	19	15	9	1	....
3	2	3	2	2	13	11	12	12	19	18	17	2	...

TABLE VII.—DEATHS, 1885.—Continued.

TOWNS AND DIVISIONS OF THE STATE.	Population, 1885.	DEATHS.				Under one year.	1 and under 2.
		Whole Number.	In each 1000 of Populat'n.	Number of each Sex.	SEX.		
Burrillville.......	5,126	75	14.6	38	Males.....	9	2
				37	Females . .	8	1
*Cranston	*4,725	104	22.0	49	Males.....	9	4
				55	Females . .	2	2
Cumberland......	7,163	176	24.5	93	Males.....	22	7
				83	Females . .	21	9
East Providence ..	6,816	113	16.6	61	Males.....	18	2
				52	Females . .	10	4
Foster...........	1,397	29	20.7	14	Males.....	....	....
				15	Females .	2	2
Glocester	1,922	30	15.6	13	Males.....	1	....
				17	Females . .	3	....
Johnston.........	7,274	91	12.5	38	Males.....	8	2
				53	Females . .	14	2
Lincoln..........	17,229	335	19.5	153	Males.....	62	12
				182	Females . .	51	16
North Providence.	1,478	19	12.8	13	Males.....	....	....
				6	Females . .	1	....
North Smithfield..	3,077	35	11.4	20	Males.....	1	1
				15	Females . .	1	....
Pawtucket	22,906	434	19.0	202	Males.....	51	12
				232	Females . .	44	17
Scituate..........	3,606	78	21.6	38	Males.....	9	....
				40	Females . .	6	1
Smithfield........	2,338	32	13.7	13	Males.....	3	....
				19	Females . .	2	....
Woonsocket	16,199	304	18.8	139	Males.....	44	12
				165	Females . .	36	11
TOWNS, PROV. CO.	102,536	1,855	18.1	884	Males.....	237	54
				971	Females . .	201	65
PROVIDENCE CITY.	118,070	2,164	18.3	1,052	Males.....	205	55
				1,112	Females . .	169	49
Charlestown......	1,042	18	17.3	9	Males.....	....	....
				9	Females . .	1	...
Exeter...........	1,086	19	17.5	10	Males.....	1	....
				9	Females . .	....	....
Hopkinton	2,796	37	13.3	20	Males.....	2	1
				17	Females . .	1	1
N. Kingstown	3,894	52	13.3	27	Males.....	4	2
				25	Females . .	4	3
S. Kingstown.....	5,549	70	12.6	38	Males.....	3	....
				32	Females . .	4	....
Richmond........	1,744	23	13.2	13	Males.....	....	....
				10	Females . .	2	....
Westerly.........	6,333	94	14.8	36	Males.....	9	2
				58	Females . .	9	4
WASHINGTON CO..	22,444	313	14.0	153	Males.....	19	5
				160	Females . .	21	8
State Ins. Cranston	1,280	106	82.8	56	Males.....	....	2
				50	Females . .	2	3

* Not including State Institutions.

Table VII.—DEATHS, 1885.—Continued.

2 and under 3.	3 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and under 60.	60 and under 70.	70 and under 80.	80 and under 90.	90 and over.	Not stated.
2	1	4	2	....	....	3	...	4	4	4	2	1	....
....	....	2	1	....	5	4	....	6	2	7	1	....	....
....	1	....	1	1	3	4	7	5	3	5	5	....	1
....	2	2	....	1	4	7	7	7	5	7	5	4	....
2	3	4	3	5	9	4	6	10	5	6	6	1	....
....	7	3	3	5	9	7	4	1	5	7	1	1	....
1	2	....	3	4	4	4	9	6	3	1	4	....	....
2	3	3	....	....	2	5	4	4	7	2	5	....	1
....	....	....	....	....	1	2	1	1	5	2	1	1	....
....	....	....	....	2	1	2	....	....	1	3	1	1	...
....	....	....	....	....	1	....	1	3	2	3	1	1	....
....	1	....	1	2	1	....	1	1	1	2	4	....	....
....	....	2	3	3	1	3	5	5	2	2	2	....	...
1	1	....	1	2	7	1	2	6	9	1	4	1	1
7	10	5	1	2	6	15	7	8	8	5	4	1	....
10	6	8	5	10	11	13	10	6	14	16	5	...	1
1	2	2	1	...	1	....	1	1	2	2	....	....	....
....	....	1	....	....	1	1	1	....	1	...	....	....	...
....	....	....	1	....	1	2	....	7	2	5	...	....	....
....	....	....	....	1	3	....	3	1	2	4	....	....	....
6	4	2	3	5	17	13	15	14	27	19	12	1	1
7	7	5	7	5	21	18	15	15	35	18	17	1	....
....	1	2	1	....	4	1	3	2	6	9	....	....	...
....	1	1	....	....	1	4	5	....	7	8	6	....	....
....	....	....	....	1	1	1	3	1	1	....	2	....	....
....	....	....	....	1	1	3	....	5	1	2	4	....	....
8	2	5	2	8	9	11	7	5	13	7	5	1	....
4	6	3	5	8	18	11	10	7	21	16	7	2	....
27	26	26	21	29	58	63	65	72	83	70	44	7	2
24	34	28	23	37	85	76	62	59	111	93	60	10	3
33	53	47	23	40	93	97	90	86	99	94	36	1	....
34	28	41	19	45	120	104	107	95	106	109	70	16	....
....	....	...	....	....	2	1	1	....	2	2	1	....	....
....	....	1	....	1	....	1	1	....	1	....	3	....	....
....	...	1	....	....	....	....	1	2	....	4	1	....	....
....	....	....	....	....	....	2	....	....	....	3	3	1	....
....	....	...	....	....	1	2	....	3	3	7	1	....	....
1	....	....	....	....	1	1	4	1	4	1	2	....	....
1	....	....	....	1	2	3	....	4	3	4	1	2	....
....	....	....	....	....	4	2	1	3	1	6	....	1	....
1	2	....	1	1	4	2	1	6	5	6	3	2	1
....	1	....	1	1	3	1	1	4	1	4	7	4	....
....	....	....	....	....	1	....	1	2	3	4	1	....	1
....	1	...	....	....	2	....	2	1	....	2	....	....	....
2	3	2	1	2	....	3	3	3	2	4	....	....	....
4	5	5	1	3	4	2	4	5	2	5	4	1	....
4	5	3	2	4	10	11	7	20	18	31	8	4	2
5	7	6	2	5	14	9	13	14	9	21	19	7	....
....	1	....	....	....	6	10	13	6	12	1	1	....	4
1	1	1	2	2	6	6	7	7	3	4	3	1	1

Table VII Continued.—DEATHS, 1885, Recapitulation.

DIVISIONS OF THE STATE.	Population, 1885.	Deaths.				Under one year.	1 and under 2.
		Whole Number.	In each 1000 of Population.	Number of each Sex.	SEX.		
Bristol County..	11,340	185	16.3	100	Males.....	11	4
				85	Females . .	13	3
Kent County....	21,614	355	16.4	167	Males.....	43	10
				188	Females . .	27	4
Newport County.	28,280	411	14.5	195	Males.....	37	9
				216	Females . .	27	7
Providence Co ..	*219,326	*4,019	18.2	1,936	Males.....	442	109
				2,083	Females . .	370	114
Washington Co..	22,444	313	14.0	153	Males.....	19	5
				160	Females . .	21	8
State Inst's	1,280	106	82.8	56	Males.....	....	2
				50	Females . .	2	3
Whole State....	304,284	5,389	17.7	2,607	Males.....	552	139
				2,782	Females . .	460	139

* Not including State Institutions.

TABLE VII Continued.—DEATHS, 1885, RECAPITULATION.

2 and under 3.	3 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and under 60.	60 and under 70.	70 and under 80.	80 and under 90.	90 and over.	Age not stated.
2	2	5	4	2	7	5	5	7	11	25	10	....	....
2	3	3	1	3	6	10	5	8	13	8	6	1	....
3	8	4	6	6	12	7	4	14	21	19	7	2	1
4	7	5	6	7	20	8	12	9	20	29	24	6	....
2	3	2	3	7	10	11	7	20	30	29	20	2	3
5	3	8	3	3	18	13	17	18	26	30	28	5	5
60	79	73	44	69	151	160	155	158	182	164	80	8	2
58	62	69	42	82	205	180	169	154	217	202	130	26	3
4	5	3	2	4	10	11	7	20	18	31	8	4	2
5	7	6	2	5	14	9	13	14	9	21	19	7	....
....	1	....	....	....	6	10	13	6	12	1	1	....	4
1	1	1	2	2	6	6	7	7	3	4	3	1	1
71	98	87	59	88	196	204	191	225	274	269	126	16	12
75	83	92	56	102	269	226	223	210	288	294	210	46	9

TABLE VIII.—CAUSES OF DEATH, 1885.

Arranged Alphabetically; showing the Number of each Sex, who died from each cause, in each Month and in the whole year 1885; also the Number of American and of Foreign Parentage, from each cause, for the year.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Accidents, various	6	1	8	..	5	..	5	..	1	..	4	..	2	..	1	1	7	2	5	..	1	1	4	..	25	29	49	5	54
" Asphyxia	..	1	2	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	1	2	..	..	..	5	4	5	4	9
" Burns and Scalds	2	2	1	1	1	1	..	..	1	..	1	1	..	3		..	..	1	..	..	..	2	1	1	8	11	7	12	19
" Drowning	5	1	1	..	1	..	1	1	3	1	3	..	4	..	7	1	2	1	2	..	3	..	5	..	14	28	37	5	42
" Falls	1	1	2	1	3	..	2	..	..	1	..	..	2	1	..	..	3	1	2	1	3	1	..	..	11	14	18	7	25
" Poisoning	1	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	1	1	1	..	2	7	7	2	9
" Railroad	2	1	.	..	2	..	1	..	2	..	1	..	1	..	1	1	1	..	1	1	..	..	..	..	7	8	12	3	15
Abscesses, various	1	..	1	..	..	..	4	..	..	1	1	2	2	1	1	1	1	..	1	1	..	..	1	2	12	9	13	8	21
" Pelvic	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Abortion	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	...	2	2
Adenitis	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Alcoholism	1	..	1	..	..	1	..	..	2	..	..	..	..	..	2	..	..	..	1	..	..	..	..	..	2	6	7	1	8
Anæmia	..	..	..	..	1	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	3	3	4	2	6
Aneurism, Abdominal	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	2	2	2	2	4
Angina Pectoris	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..	1	..	..	..	2	..	..	..	4	2	4	2	6
Apoplexy	11	8	13	9	8	9	7	8	9	6	6	9	8	5	3	8	7	6	6	6	6	8	8	11	116	69	92	93	185
Asthenia	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	3	2	4	1	5
Asthma	..	3	..	1	2	..	1	2	..	1	1	3	..	1	..	..	..	1	..	1	..	1	2	1	7	14	6	15	21
Atelectasis Pulmonum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	....	1	1	...	1
Bladder, Disease of	..	..	1	..	..	..	1	..	1	..	..	..	1	1	..	1	1	..	..	..	..	..	1	..	5	3	6	2	8
Bones, Disease of	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	.	..	4	....	3	1	4

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Bowels, Disease of.	..	..	..	1	..	..	..	.	..	..	..	..	1	..	3	..	..	2	..	..	..	..	..	..	3	4	4	3	7
" Intussusception of	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	1	3	1	3	4
Brain, Disease of	2	2	2	3	4	3	1	2	..	..	2	1	3	3	3	2	3	2	3	5	1	3	4	2	36	20	28	28	56
" Congestion of.	..	1	1	1	..	..	1	1	..	1	1	1	1	..	1	2	..	..	2	..	1	1	..	1	10	7	8	9	17
" Inflammation of	3	6	6	5	3	4	4	6	6	..	6	2	5	6	3	5	2	2	2	4	4	..	6	2	36	56	50	42	92
Bronchitis, Acute	5	6	6	6	9	7	7	11	4	2	7	5	2	2	7	1	2	1	3	6	5	3	3	3	62	51	60	53	113
" Chronic	1	2	2	3	2	1	3	4	1	4	2	2	3	4	2	4	1	1	2	1	2	5	1	2	29	26	22	33	55
Calculus	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Cancer, Various.	5	6	2	5	2	3	1	5	..	6	1	5	4	3	..	6	6	5	3	3	..	7	1	7	56	30	25	61	86
" of Breast.	..	5	..	2	..	2	..	2	..	2	..	2	..	2	..	3	..	..	..	..	..	..	..	4	14	10	...	24	24
" of Face.	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	2	3	...	3
" of Liver.	..	..	..	..	..	..	..	..	1	..	..	3	1	3	3	2	..	1	1	..	..	..	2	1	10	8	8	10	18
" of Ovaries.	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	...	2	2
" of Rectum.	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
" of Stomach.	2	1	..	..	1	1	..	1	1	2	..	3	2	2	2	1	3	2	1	3	2	1	1	3	18	17	15	20	35
" of Uterus.	..	1	..	4	..	1	..	2	..	..	..	2	..	4	..	4	..	..	..	3	..	3	..	..	13	11	...	24	24
Carbuncle	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Cellulitis Pelvic	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	2	2
Child-birth	..	2	..	2	..	1	..	2	..	3	..	3	..	1	..	1	..	1	..	1	..	..	..	..	8	9	...	17	17
" Puerperal Conv.	..	..	..	2	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	2	..	..	4	3	...	7	7
" " Fever	..	1	..	2	..	3	..	2	..	..	..	1	..	3	..	1	.	1	..	2	..	1	..	1	8	10	...	18	18
Chlorosis	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	1	1	1	2
Cholera Infantum	3	1	2	..	2	1	2	1	1	1	5	..	66	61	46	10	14	18	4	2	3	3	2	1	128	151	150	129	279
" Morbus.	..	1	.	..	..	..	1	..	..	1	1	..	7	4	3	3	1	1	..	..	1	..	..	..	9	15	14	10	24
Colic	..	..	..	..	1	..	..	..	1	2	..	..	1	..	1	2	..	..	..	..	..	..	..	1	4	5	4	5	9
Consumption	31	39	29	30	27	35	36	35	33	40	37	33	40	36	25	28	37	38	27	25	29	34	31	26	315	466	382	399	781

TABLE VIII.—CAUSES OF DEATH, 1885.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Convulsions	6	3	8	3	4	4	7	5	3	6	4	3	5	4	8	6	4	5	3	1	2	4	10	4	51	60	64	47	111
Croup, Membraneous	7	12	1	6	4	3	2	7	5	1	1	4	1	..	..	..	1	..	6	2	4	7	13	7	42	52	45	49	94
Cyanosis	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	..	3	2	3	2	5
Cystitis	..	.	3	..	1	..	1	..	..	..	..	..	1	..	1	..	3	.	1	..	..	1	..	..	10	2	11	1	12
Debility	..	1	1	1	1	2	3	2	1	..	1	1	2	3	2	2	1	3	1	1	2	3	..	1	22	13	15	20	35
" Infantile	5	2	2	7	3	3	4	2	3	1	..	2	5	4	3	4	6	8	3	5	8	1	6	6	42	51	48	45	93
" Premature Birth	3	1	3	5	..	1	2	1	1	..	1	1	2	4	2	1	..	2	1	1	2	1	1	3	19	20	18	21	39
Delirium Tremens	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	2	3	5	...	5
Diabetes	..	..	1	2	1	1	..	1	..	2	1	1	1	1	1	..	..	1	3	..	..	2	2	..	16	5	10	11	21
Diarrhœa	1	1	..	2	1	1	1	..	2	1	1	1	10	10	15	8	5	3	3	2	..	..	..	2	28	42	39	31	70
" Chronic	1	..	..	..	1	1	..	..	..	..	..	1	..	2	1	2	1	2	..	1	..	..	1	..	7	7	5	9	14
Diphtheria	6	6	6	2	3	4	..	5	3	3	1	3	4	7	4	2	4	5	4	4	13	4	9	7	48	51	47	52	99
Dropsy	1	..	3	1	4	1	..	2	1	1	2	1	3	1	4	2	4	1	5	1	1	..	2	3	30	14	30	14	44
Dysentery	..	..	..	..	1	..	1	..	3	..	1	3	4	1	2	8	2	4	2	2	1	..	..	1	16	20	17	19	36
Embolism	1	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	2	..	..	1	..	4	4	3	5	8
Enteritis	..	..	..	1	1	..	2	2	..	1	4	1	5	4	1	1	4	2	1	1	..	..	1	..	15	17	19	13	32
" Gastro	..	..	2	1	..	2	..	.	2	..	..	1	2	2	5	3	..	4	..	1	2	..	..	..	10	17	13	14	27
Entero Colitis	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	..	..	1	..	..	..	..	..	3	2	3	2	5
Epilepsy	2	3	1	1	..	..	2	1	2	1	..	1	1	1	..	..	2	1	..	1	..	..	2	1	12	11	12	11	23
Erysipelas	1	2	1	2	1	3	1	2	..	1	2	..	1	1	..	1	..	1	1	1	..	1	..	..	13	10	8	15	23
Exposure to Cold	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	2
Fever	1	..	1	2	..	1	1	1	..	..	..	..	..	..	..	2	2	2	2	1	1	..	..	1	9	9	8	10	18
" Bilious	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	1	1
" Intermittent	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Fever, Malarial	3	1	1	..	..	..	..	..	..	..	1	1	4	2	4	1	5	3	..	3	1	1	..	1	13	20	20	13	33
" Typhoid	4	7	3	5	3	2	1	3	1	3	4	1	1	2	5	4	4	11	9	9	5	9	3	5	46	58	43	61	104
" Gastric	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	1	..	..	..	..	..	..	..	..	1	....	...	1	1
Gall Stones	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	....	...	1	1
Gangrene	..	1	..	1	..	1	1	2	1	..	..	..	1	2	1	1	2	..	..	2	..	2	1	..	13	6	7	12	19
Gastritis, Acute	..	1	..	1	2	..	..	1	2	2	..	1	1	6	1	..	..	1	..	3	..	1	1	2	8	18	7	19	26
Goitre	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Heart, Disease of	19	14	12	13	14	17	12	14	12	16	9	12	9	13	9	10	10	14	13	17	16	12	11	9	178	129	146	161	307
" Fatty Degeneration	1	1	..	..	..	..	..	1	..	..	..	1	..	2	1	1	..	..	..	1	..	..	..	1	4	6	2	8	10
" Inflammation of	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	3	2	..	..	..	..	..	..	1	4	5	4	5	9
" Valvular Disease of	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	2	3	1	4	5
Hæmatemesis	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Hæmaturia	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Hemiplegia	1	..	1	..	..	..	..	..	..	..	3	..	..	1	.	..	..	..	.	..	..	..	..	..	2	4	5	1	6
Hæmoptysis	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	2	1	1	2
Hemorrhage	..	1	1	1	1	1	1	2	1	..	1	1	2	1	2	..	1	2	1	..	1	2	1	..	15	9	13	11	24
Hepatitis	..	1	..	1	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	2	4	1	5	6
Hernia	1	2	..	..	..	1	..	..	..	1	..	..	1	..	..	1	..	1	..	..	..	..	2	..	5	5	4	6	10
Hip-joint, Disease of.	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	....	5	2	3	5
Hydrocephalus	1	..	1	..	1	1	..	..	1	2	..	1	1	..	..	3	..	..	1	1	..	..	2	..	11	5	8	8	16
Icterus Neonatorum	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Inanition	2	3	..	..	..	..	2	3	2	1	..	1	..	1	..	2	..	1	1	1	1	..	..	..	13	9	9	13	22
Influenza	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	2	...	2
Insanity	1	2	2	..	..	3	..	2	4	..	..	1	..	2	1	2	1	3	2	1	5	2	..	1	18	17	16	19	35
Intemperance	..	1	..	1	..	1	2	1	..	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	2	7	4	5	9
Jaundice	..	1	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	..	1	..	..	1	1	..	2	5	4	3	7

TABLE VIII.—CAUSES OF DEATH. 1885.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	Am	For.	M.	F.	Total.
Kidneys, Disease of	..	..	..	1	..	1	1	2	2	..	1	..	2	..	1	2	1	..	2	..	..	..	..	..	8	8	10	6	16
" Bright's Disease	3	2	5	4	8	4	7	..	5	4	5	4	6	4	9	5	9	7	4	4	4	3	6	2	59	55	71	43	114
Laryngitis	..	..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	1	2	1	2	7	2	3	6	9
Liver, Disease of	1	1	1	1	1	8	2	1	..	2	2	2	1	4	2	..	2	2	..	1	3	1	3	1	24	18	18	24	42
" Cirrhosis of	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	2	1	4	5
Malformations	..	..	..	2	1	1	3	..	1	..	..	1	..	..	..	2	1	2	..	1	..	..	..	..	8	7	6	9	15
Malignant Pustule	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	....	1	...	1	1
Malnutrition	..	..	..	2	2	..	1	1	..	..	1	..	1	..	..	..	..	..	..	1	1	..	1	..	7	4	7	4	11
Marasmus	5	1	..	2	2	1	1	2	3	1	2	..	4	9	4	4	6	3	3	5	2	3	2	2	27	40	34	33	67
Measles	2	1	4	2	4	6	4	4	4	2	2	1	3	1	1	..	2	..	1	..	..	..	..	1	19	26	27	18	45
Meningitis, Acute	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	1	2
" Spinal	..	1	..	..	1	1	..	..	1	..	..	1	..	1	..	..	2	1	..	..	..	..	1	1	4	7	5	6	11
" Cerebro Spinal	..	1	2	..	1	2	..	1	..	1	..	..	1	1	2	..	..	..	2	1	..	..	..	1	11	5	8	8	16
" Tubercular	2	..	1	..	1	3	..	3	..	3	3	2	1	1	..	2	..	1	1	1	1	3	2	..	14	17	12	19	31
Murder	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	2	1	2	1	3
Nephritis	2	..	1	1	..	3	..	1	1	1	..	2	3	4	1	3	1	1	1	..	..	1	1	1	19	10	11	18	29
Nervous Prostration	..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	3	1	2	2	4
Neuralgia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	....	...	1	1
Obstipation	2	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	3	5	...	5
Old Age	8	20	12	21	5	21	4	20	13	7	5	14	7	14	6	19	6	14	4	10	10	12	6	9	183	84	86	181	267
Œsophagus, Stricture of	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1	...	1
Ossification of Artery	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Paralysis	5	3	3	6	4	7	3	1	5	8	3	3	5	3	5	8	3	6	4	4	3	1	3	2	65	33	46	52	98
Pericarditis	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	Am.	For.	M.	F.	Total.
Peritonitis	4	1	1	2	1	..	2	2	1	1	..	..	1	2	3	3	3	2	..	..	1	1	1	3	17	18	18	17	35
Perityphlitis	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	3	....	3	...	3
Pemphigus	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Pleurisy	2	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	1	2	5	6	1	7
Pneumonia	27	23	21	30	33	46	27	49	26	24	13	12	3	4	4	8	4	7	12	10	9	7	19	13	243	188	198	233	431
" Conges. of Lungs.	4	3	1	2	2	1	4	4	1	3	1	1	..	..	..	1	1	..	..	..	..	1	2	2	28	6	16	18	34
Prostate, Disease of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	..	3	1	4	...	4
Purpura Hemorrhagica	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	....	2	...	2	2
Pyæmia	..	..	..	..	1	1	2	1	1	..	..	..	..	1	2	1	1	..	..	..	..	1	1	..	7	6	8	5	13
Quinsy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	....	1	...	1
Rachitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	....	1	...	1
Rheumatism	1	1	1	1	1	..	5	1	1	1	1	3	5	1	..	2	2	1	..	2	2	1	..	1	17	17	19	15	34
Scarlatina	8	11	2	10	10	14	6	4	..	2	1	..	1	2	..	3	2	2	1	2	2	1	3	4	48	43	36	55	91
Scrofula	..	..	1	1	..	2	1	..	..	..	1	..	1	1	2	..	1	..	..	1	1	..	..	..	7	6	8	5	13
Septicæmia	..	..	..	..	..	..	..	1	..	1	1	1	1	1	..	..	..	1	..	1	1	..	1	..	4	6	4	6	10
" Puerperal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	....	1	...	1	1
Skin Disease	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	....	1	1	...	1
Spine, Disease of	1	2	..	1	1	..	1	..	1	2	..	1	2	1	1	..	5	2	..	..	1	..	1	2	17	8	14	11	25
Stomatitis	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Stomach, Disease of	..	3	..	1	1	..	1	1	..	3	..	..	1	2	..	..	2	1	..	..	1	2	1	1	11	10	7	14	21
" Inflammation of	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	....	1	1	2
Strangulation	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1	...	1
Stricture of Colon	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Suicide	1	..	1	..	1	1	2	2	..	..	3	..	1	1	1	..	3	..	1	..	1	..	1	..	11	9	16	4	20
Sunstroke	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Surgical Operation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	....	...	1	1

TABLE VIII.—CAUSES OF DEATH, 1885.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Syncope	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	....	2	1	1	2
Syphilis	1	..	..	1	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	2	..	..	4	3	3	4	7
Tabes Mesenterica	..	..	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..	2	..	3	4	5	2	7
Teething	..	..	..	1	1	1	1	2	1	..	3	..	1	2	3	1	1	..	1	3	3	..	3	1	15	14	18	11	29
Tetanus	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	2	...	2
Thrombosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Trismus Nascentium	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1	1	2
Tuberculosis	2	..	..	3	3	5	2	1	1	1	1	4	2	2	..	1	..	5	2	1	..	3	2	2	22	21	15	28	43
Tumors	..	3	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	1	3	..	..	1	2	8	6	4	10	14
" of Abdomen	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
" of Brain	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
" Ovarian	..	..	..	3	..	..	..	1	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	4	4	...	8	8
" of Uterus	..	..	..	1	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	1	...	4	4
Uræmia	..	..	..	..	..	2	..	..	1	..	..	1	..	1	..	1	..	..	1	1	1	..	..	..	6	3	3	6	9
Urethra, Stricture of	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Uterus, Disease of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	2	....	...	2	2
Whooping Cough	3	2	2	1	4	..	2	3	1	1	1	..	..	1	2	6	3	4	3	1	1	..	1	..	24	18	23	19	42
Unknown	4	2	4	1	1	5	1	1	4	3	2	1	4	3	1	4	4	2	2	1	..	7	..	2	27	32	27	32	59

TABLE IX.—CAUSES OF DEATH, 1885.

Arranged Alphabetically; showing the Number of each Sex, who died from each Cause, in each Period of Life.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	Total.
Accidents, Various	4	..	..	..	..	..	1	..	2	..	6	..	5	1	4	2	7	..	9	1	4	..	1	..	3	..	3	1	..	..	..	..	49	5	54
" Asphyxia	1	4	..	..	..	..	2	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	9
" Burns and Scalds	1	1	..	1	1	2	1	..	..	1	..	2	..	..	1	2	..	..	2	2	1	..	..	..	..	1	..	..	..	..	..	..	7	12	19
" Drowning	..	..	2	..	..	..	2	1	6	..	4	..	4	2	3	2	5	..	3	..	4	..	..	..	2	..	1	..	..	..	1	..	37	5	42
" Falls	1	..	..	2	..	..	..	1	2	..	2	..	1	..	2	..	3	..	1	..	2	..	1	2	1	..	1	..	1	2	..	..	18	7	25
" Poisoning	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	1	1	..	..	2	1	1	..	1	..	..	..	..	..	..	..	7	2	9
" Railroad	..	..	..	..	..	1	..	..	..	..	..	..	2	..	2	..	1	..	3	..	1	2	1	..	1	..	..	..	..	..	1	..	12	3	15
Abscesses, Various	2	1	2	1	..	..	..	..	1	1	..	1	1	..	2	1	2	2	1	..	1	..	..	1	1	..	..	..	..	..	..	..	13	8	21
" Pelvic	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Abortion	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	2	2
Adenitis	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Alcoholism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	1	..	2	..	..	..	..	..	..	..	..	..	7	1	8
Anæmia	1	1	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	4	2	6
Aneurism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	1	..	..	..	..	..	2	2	4
Angina Pectoris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	1	..	1	..	..	1	..	..	..	..	4	2	6
Apoplexy	..	..	..	..	..	..	..	..	..	1	..	..	1	1	2	2	2	3	11	8	12	8	26	29	25	26	12	15	1	..	..	..	92	93	185
Asthenia	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	2	..	..	..	..	..	..	..	4	1	5
Asthma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	1	..	1	4	3	1	6	1	..	..	1	..	..	6	15	21
Atelectasis Pulmonum	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Bladder, Disease of	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	..	2	1	1	..	1	..	..	..	..	..	6	2	8
Bones, Disease of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	1	..	..	..	..	3	1	4

TABLE IX.—CAUSES OF DEATH, 1885.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Bowels, Disease of	1	..	..	..	..	..	..	..	..	..	1	..	1	..	1	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	4	3	7
" Intussusception of	..	2	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	4
Brain, Disease of	1	2	1	2	..	2	1	1	2	1	2	..	..	..	1	3	1	1	4	2	1	2	8	3	4	7	2	2	..	..	..	..	28	28	56
" Congestion of	4	1	..	..	..	1	..	3	1	..	..	..	..	..	..	..	..	1	..	..	2	1	1	1	..	1	..	..	..	..	..	..	8	9	17
" Inflammation of	17	10	9	4	6	7	11	5	2	6	1	2	3	1	1	2	..	2	..	2	..	..	..	1	..	..	..	..	..	..	..	..	50	42	92
Bronchitis, Acute	30	25	6	6	3	..	4	2	..	2	2	1	2	2	..	2	..	1	4	3	4	2	3	3	2	3	..	1	..	..	..	..	60	53	113
" Chronic	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	1	3	1	3	4	3	6	8	7	7	3	4	..	2	..	..	22	33	55
Calculus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	...	1
Cancer, Various	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	1	1	8	1	8	6	12	9	10	5	10	..	10	..	1	..	1	25	61	86
" of Breast	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	8	..	8	..	3	..	1	..	2	..	..	..	..	...	24	24
" of Face	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	3	...	3
" of Liver	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	6	3	1	4	..	2	..	..	..	..	..	..	8	10	18
" of Ovaries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	...	2	2
" of Rectum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
" of Stomach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	4	2	6	6	4	3	2	1	1	..	..	1	..	15	20	35
" of Uterus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	5	..	6	..	5	..	2	..	..	..	..	..	..	...	24	24
Carbuncle	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	...	1
Cellulitis Pelvic	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	2	2
Child-birth	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	6	..	2	..	..	..	..	..	..	..	..	..	..	..	..	...	17	17
" Puerperal Conv.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	7	7
" " Fever.	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	9	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	18	18
Chlorosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	1	2
Cholera Infantum	125	114	22	10	1	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	150	129	279

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Cholera Morbus	6	3	..	..	..	..	2	..	..	1	1	..	1	..	...	...	..	1	1	..	1	1	..	3	1	..	1	1	..	..	..	..	14	10	24
Colic	2	1	..	..	..	..	..	..	..	..	..	..	..	..	...	...	..	1	..	..	..	..	..	2	1	1	1	..	..	..	..	..	4	5	9
Consumption	12	7	1	7	1	1	2	2	2	5	10	13	27	53	110	131	82	77	44	44	49	24	28	15	11	14	2	4	..	..	1	2	382	399	781
Convulsions	31	20	15	14	8	6	3	1	3	1	..	1	1	1	...	...	..	1	..	..	..	1	1	..	1	..	..	..	1	..	..	1	64	47	111
Croup, Membraneous	6	7	6	14	7	8	14	10	12	8	..	..	..	..	...	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	45	49	94
Cyanosis	3	2	..	..	..	..	..	..	..	..	..	..	..	..	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	5
Cystitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	...	..	..	..	1	1	..	4	..	5	..	1	..	..	..	..	..	11	1	12
Debility	..	..	..	..	1	..	..	..	..	..	..	..	1	..	...	2	..	1	1	2	2	1	1	5	6	8	3	1	..	..	..	..	15	20	35
" Infantile	46	42	2	3	..	..	..	..	..	..	..	..	..	..	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48	45	93
" Premature Birth	18	21	..	..	..	..	..	..	..	..	..	..	..	..	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	21	39
Delirium Tremens	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	..	1	..	2	..	..	..	1	.	..	..	..	..	..	..	5	...	5
Diabetes	..	..	..	..	..	..	..	1	..	2	1	..	..	..	1	...	..	..	1	1	2	..	4	5	1	2	..	..	..	..	..	..	10	11	21
Diarrhœa	30	23	3	2	..	1	..	1	..	..	..	..	..	..	...	...	..	..	..	..	..	..	3	1	3	2	..	..	..	..	..	1	39	31	70
" Chronic	..	..	..	..	..	..	..	..	..	..	..	..	..	.	1	...	1	1	..	..	2	..	..	4	1	3	..	1	..	..	..	..	5	9	14
Diphtheria	7	4	3	5	12	3	10	9	10	22	1	6	3	1	1	...	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	47	52	99
Dropsy	2	1	1	..	..	..	..	..	..	..	1	..	1	..	1	...	3	1	1	3	4	1	5	3	9	3	2	1	..	..	..	..	30	14	44
Dysentery	9	3	..	2	1	2	2	..	..	..	..	..	..	..	...	1	1	3	2	1	1	1	1	2	..	2	..	2	..	..	..	..	17	19	36
Embolism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	..	..	1	..	..	..	..	3	2	..	..	1	..	..	..	..	3	5	8
Enteritis	6	5	3	1	1	..	1	..	..	..	..	..	1	..	2	...	1	1	1	1	..	2	1	1	2	1	..	1	..	..	..	..	19	13	32
" Gastro	5	7	2	..	..	1	..	1	..	..	..	..	..	1	1	...	1	1	1	3	1	..	..	..	2	..	..	..	..	..	..	..	13	14	27
Entero Colitis	3	1	..	..	..	..	..	..	..	..	..	..	..	..	...	...	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3	2	5
Epilepsy	1	..	..	..	..	..	1	..	..	1	1	..	..	2	1	2	3	2	1	1	1	..	1	2	2	1	..	..	..	..	..	..	12	11	23
Erysipelas	2	2	..	..	..	..	..	..	..	..	..	..	..	1	...	2	..	2	1	1	..	1	1	1	4	3	..	2	..	..	..	..	8	15	23
Exposure to Cold	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	...	2
Fever	2	1	1	..	1	..	..	2	..	1	..	1	..	..	1	...	2	2	..	..	..	..	1	1	..	..	..	2	..	..	..	..	8	10	18

TABLE IX.—CAUSES OF DEATH, 1885.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Fever, Bilious	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	...	1	1
" Intermittent	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	...	1	1
" Malarial	2	1	2	2	..	..	1	1	1	..	1	..	4	2	1	2	2	1	..	1	3	..	2	..	..	2	1	1	..	..	..	..	20	13	33
" Typhoid	..	..	1	1	..	2	2	..	5	6	1	9	5	5	9	12	11	8	2	8	4	4	3	4	..	2	..	..	..	..	..	..	43	61	104
" Gastric	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	...	1	1
Gall Stones	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	...	1	1
Gangrene	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	..	1	1	2	4	2	1	2	1	..	..	..	7	12	19
Gastritis, Acute	..	1	..	..	..	2	..	1	..	1	..	..	..	..	..	..	..	1	2	3	2	3	2	2	..	1	1	4	..	..	..	..	7	19	26
Goitre	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Heart, Disease of	5	5	1	..	1	..	1	..	5	2	4	3	3	4	4	8	7	13	21	16	21	33	34	27	32	37	6	13	1	..	..	..	146	161	307
" Fatty Degeneration	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	1	3	..	2	..	..	..	..	2	8	10
" Inflammation of	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	1	..	1	2	..	..	..	1	..	..	..	..	..	..	4	5	9
" Valvular Disease of	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	4	5
Hæmatemesis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Hæmaturia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	...	1
Hemiplegia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	..	..	1	1	..	..	..	..	..	5	1	6
Hæmoptysis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Hemorrhage	4	3	..	..	..	..	..	..	..	1	..	..	1	..	3	1	1	1	..	..	3	2	..	1	1	1	..	1	..	..	..	..	13	11	24
Hepatitis	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	5	6
Hernia	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3	3	1	..	..	1	..	..	..	..	4	6	10
Hip-joint, Disease of	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	3	5
Hydrocephalus	6	6	2	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	16
Icterus Neonatorum	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Inanition	8	11	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	9	13	22
Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	...	2
Insanity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	5	3	3	4	2	3	3	4	1	4	..	..	..	..	1	..	16	19	35
Intemperance	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	1	2	1	1	..	..	..	..	..	..	..	4	5	9
Jaundice	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	1	..	..	..	..	..	..	..	4	3	7
Kidneys, Disease of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	1	1	3	1	4	2	..	..	..	1	..	..	10	6	16
" Bright's Disease of	..	..	..	..	..	..	..	1	..	..	..	..	3	2	5	3	10	5	6	5	13	11	11	9	18	5	4	2	..	..	1	..	71	43	114
Laryngitis	..	..	..	2	1	..	..	2	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	3	6	9
Liver, Disease of	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	3	2	1	7	1	4	4	7	5	3	1	..	..	..	1	..	18	24	32
" Cirrhosis of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	1	1	..	..	..	..	..	..	..	..	1	4	5
Malformations	5	7	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	6	9	15
Malignant Pustule	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Malnutrition	7	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	4	11
Marasmus	28	23	2	1	1	1	..	1	..	..	1	2	..	..	..	..	..	..	..	1	..	..	2	3	..	1	..	..	..	..	..	..	34	33	67
Measles	8	2	9	6	3	3	4	2	2	2	..	1	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	18	45
Meningitis, Acute	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
" Spinal	1	1	1	1	1	1	1	1	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	6	11
" Cerebro Spinal	4	..	1	2	1	..	..	2	..	2	..	2	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	8	8	16
" Tubercular	2	2	3	8	..	1	3	4	3	3	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	19	31
Murder	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	2	1	3
Nephritis	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	1	2	4	6	1	2	2	..	3	4	..	1	..	..	..	..	11	18	29
Nervous Prostration	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	..	..	..	..	..	..	2	2	4
Neuralgia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	1	1
Obstipation	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	5	...	5
Old Age	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	22	51	56	91	7	36	1	..	86	181	267

TABLE IX.—CAUSES OF DEATH, 1885.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Œsophagus, Stricture of																															1		1	...	1
Ossification of Artery																										1							...	1	1
Paralysis		3							1				1			1	1	1	3	3	4	5	6	11	22	19	7	9			1		46	52	98
Pericarditis																											1						1	...	1
Peritonitis	1			1			1		1		2	2	1	2		3	3	3	4		3	4	1	2	1								18	17	35
Perityphlitis													1		2																		3	...	3
Pemphigus																														1			...	1	1
Pleurisy															1				1		1		2		1			1					6	1	7
Pneumonia	26	27	10	13	5	8	5	5	6	3	6	4	4	4	8	14	20	9	22	27	20	28	34	39	23	32	7	17	2	1		2	198	233	431
" Conges. of Lungs	6	8	3	2	2			1								1			1			1	2	1	1	3	1	1					16	18	34
Prostate, Disease of																							1		2		1						8	...	4
Purpura Hemorrhagica										1						1																	..4	2	2
Pyæmia							1		1		1		1	1		1		2		1	1		2		1								.	5	13
Quinsy													1																				1	...	1
Rachitis			1																														1	...	1
Rheumatism	1						3		2		2			4	3		3	2			3	3	1	2	1	2							19	15	34
Scarlatina	1	5	5	9	6	11	10	20	9	8	2		2	1	1													1					36	55	91
Scrofula	3		1				2			3								1					1	1	1								8	5	13
Septicæmia	1					1										1		1		1	3			1						1			4	6	10
" Puerperal																				1													...	1	1
Skin Disease	1																																1	...	1
Spine, Disease of	3			1					1	1		2	1	1	2		1	1	1		3	1	1	2	1	1		1					14	11	25
Stomatitis	1																																1	...	1

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Stomach, Disease of	2	3	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	3	..	1	3	3	..	..	..	2	..	..	..	..	7	14	21
" Inflammation of	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	2
Strangulation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Stricture of Colon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	1	1
Suicide	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	1	3	1	6	2	3	..	1	..	..	..	..	..	..	..	16	4	20
Sunstroke	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Surgical Operation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Syncope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	2
Syphilis	..	2	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	3	4	7
Tabes Mesenterica	5	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	7
Teething	11	7	6	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	11	29
Tetanus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	...	2
Thrombosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	...	1
Trismus Nascentium	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Tuberculosis	1	2	1	2	..	1	1	..	2	..	2	..	2	3	1	10	2	6	2	..	1	..	..	4	..	..	..	..	..	..	..	..	15	28	43
Tumors	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	1	3	1	2	1	3	..	..	..	..	..	..	..	..	4	10	14
" of Abdomen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	...	1	1
" of Brain	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	...	1	1
" Ovarian	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	3	..	1	..	1	..	..	..	..	..	..	..	..	...	8	8
" of Uterus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	...	4	4
Uræmia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	1	..	2	..	..	..	1	1	..	..	..	3	6	9
Urethra, Stricture of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Uterus, Disease of	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	...	2	2
Whooping Cough	10	12	8	3	2	1	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	19	42
Unknown	11	8	1	2	..	2	1	..	..	..	..	1	..	3	4	2	2	1	2	5	1	3	2	3	1	2	1	..	1	..	..	..	27	32	59

TABLE X.—CLASSIFICATION AND PERCENTAGE, 1885.

Showing what part of the Mortality in the whole State, and in each Division, is ascribed to each Cause and Class of Causes. The percentages compiled upon the number of specified causes.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.							
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Providence City.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
185	355	144	267	1,961	2,164	313	5,389	All Causes	......	......	......	......	......	......	......	......
185	355	142	266	1,918	2,157	307	5,330	Causes Specified	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
...	...	2	1	43	7	6	59	Causes not Specified	......	......	......	......	......	......	......	......
								CLASSES.								
30	73	32	33	449	352	67	1,036	I. ZYMOTIC DISEASES	19.23	21.47	16.25	23.03	12.41	22.00	20.59	16.20
35	69	16	50	423	516	80	1,189	II. CONSTITUTIONAL DISEASES	22.07	25.63	23.85	21.19	18.80	11.00	19.45	19.00
94	133	65	119	707	993	109	2,222	III. LOCAL DISEASES	41.26	34.93	45.90	36.40	44.73	45.30	37.50	50.76
19	67	22	52	260	199	36	655	IV. DEVELOPMENTAL DISEASES	12.14	11.54	9.20	13.25	19.55	15.40	18.89	10.26
7	13	9	13	122	104	21	287	V. VIOLENCE AND OTHERWISE	5.30	6.43	4.80	6.13	4.51	6.30	3.57	3.78
								ORDERS.								
								CLASS I.								
28	74	29	30	425	327	65	978	1. Miasmatic	18.14	20.82	15.14	22.02	11.30	20.30	20.03	15.14
...	1	...	3	10	16	1	31	2. Enthetic	.58	.32	.73	.51	1.13	......	.28	......

2	1	3	...	11	9	1	27	3. Dietic....	.50	.32	.41	.54	......	2.10	.28	1.08
								CLASS II.								
13	20	4	9	116	111	24	297	1. Diathetic.	5.51	7.69	5.14	5.90	3.40	2.80	5.64	7.06
22	49	12	41	307	405	56	892	2. Tubercular...............	16.57	17.93	18.75	15.30	15.41	8.40	13.81	11.95
								CLASS III.								
29	41	29	35	226	270	27	657	1. Dis. of Nervous System.....	12.22	8.64	12.50	11.41	13.16	20.30	11.56	15.68
14	27	7	18	94	162	31	353	2. Dis. of Circulatory System..	6.56	9.94	7.40	5.17	6.76	4.90	7.61	7.60
23	27	14	36	233	319	21	673	3. Dis. of Respiratory Organs..	12.49	6.72	14.77	11.76	13.53	9.80	7.61	12.50
15	20	3	12	84	109	9	252	4. Dis. of Digestive Organs....	4.66	2.88	5.05	4.32	4.52	2.10	5.64	8.15
11	16	9	11	55	102	11	215	5. Dis. of Urinary Organs.....	3.97	3.52	4.71	3.02	4.16	6.30	4.71	5.98
...	...	...	3	5	4	2	14	6. Dis. of Reproductive Organs	.26	.64	.19	.26	1.13	......	......	......
2	1	2	1	11	14	5	36	7. Dis. of Os. and Locomo. Syst	.67	1.63	.64	.60	.38	1.40	.28	1.08
...	1	1	3	1	13	3	22	8. Dis. of Integument. Syst...	.40	.96	.60	.05	1.13	.70	.28	......
								CLASS IV.								
4	22	3	16	115	95	9	264	1. Develop. Dis. of Children...	4.91	2.88	4.40	5.90	6.00	2.10	6.18	2.16
...	4	...	4	19	24	1	52	2. Develop. Dis. of Women....	.96	.32	1.11	.99	1.50	......	1.13	2.16
9	32	18	29	87	70	22	267	3. Develop. Dis. of Old Age...	4.95	7.05	3.25	4.49	10.90	12.60	9.02	4.89
6	9	1	3	39	10	4	72	4. Develop. Dis. of Nutrition..	1.33	1.29	.46	1.88	1.13	.70	2.54	3.26
								CLASS V.								
5	6	3	5	57	83	13	172	1. Accident and Neglect.......	3.19	4.18	3.82	2.85	1.88	2.10	......	2.71
...	...	...	...	1	1	1	3	2. Homicide....	.06	.32	.05	.05	......	......	1.69	......
1	1	2	4	3	6	3	20	3. Suicide.......	.37	.96	.27	.15	1.50	1.40	.28	.54
1	6	4	3	61	14	3	92	4. Unclassified and Unspecified.	1.70	.96	.65	3.15	1.13	2.80	1.69	.54

TABLE X.—CLASSIFICATION AND PERCENTAGE, 1885.—Continued.

Number of Deaths in each Division of the State.										Percentage of Deaths in each Division.						
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Providence City.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
30	73	32	33	449	352	67	1,036	CLASS I.—ZYMOTIC.	19.23	21.47	16.25	23.03	12.41	22.00	20.59	16.20
								Order One.—Miasmatic Dis.								
1	...	...	...	.....	.....	...	1	Carbuncle	.02	.....	.....	.....	.....	.....	.....	.54
5	23	5	11	133	86	16	279	Cholera Infantum	5.16	5.12	3.98	6.92	4.16	3.50	6.48	2.70
...	2	1	...	12	9	...	24	Cholera Morbus	.44	.....	.42	.62	.....	.70	.56	.....
4	8	3	3	46	28	2	94	Croup (Pseudo Membranous)	1.74	.64	1.30	2.39	1.13	2.10	2.26	2.16
5	5	6	...	39	37	7	99	Diphtheria	1.83	2.24	1.71	2.03	.....	4.20	1.41	2.70
4	2	3	1	43	27	4	84	Diarrhœa	1.55	1.28	1.25	2.24	.38	2.10	.56	2.16
3	4	1	1	19	8	...	36	Dysentery	.68	.....	.37	.99	.38	.70	1.13	1.62
...	1	1	2	7	9	3	23	Erysipelas	.43	.96	.42	.36	.76	.70	.28	.....
...	...	...	...	.....	.....	1	1	Fever, Bilious	.02	.32	.....	.....	.....	.....	.....	.....
1	...	...	...	23	9	1	34	Fever, Malarial	.64	.32	.42	1.20	.....	.....	.....	.54
5	14	3	2	32	44	4	104	Fever, Typhoid	1.93	1.29	2.03	1.66	.76	2.10	3.96	2.70
...	...	2	1	13	.....	2	18	Fever, Unspecified	.34	.64	.....	.67	.38	1.40	.....	.....
...	1	..	...	1	.....	...	2	Influenza	.04	.....	.....	.05	.....	.....	.28	.....
..	7	2	...	27	8	1	45	Measles	.84	.32	.37	1.40	.....	1.40	1.98	.....
...	1	...	4	9	24	4	42	Pertussis	.79	1.29	1.11	.47	1.50	.....	.28	.....

...	...	...	1	.....	.....	...	1	Tonsillitis	.02	.....	.....	.....	.38	1.40	.....	.....
...	3	2	4	24	38	20	91	Scarlatina	1.70	6.45	1.76	1.25	1.50	.....	.85	.....
								Order Two.—Enthetic Dis.								
...	...	...	...	.....	1	...	1	Gonorrhœa	.02	.....	.05	.....	.....	.....	.....	.....
...	1	...	2	8	11	1	23	Septicæmia	.44	.32	.51	.42	.76	.....	.28	.....
...	...	...	1	2	4	...	7	Syphilis	.12	.....	.19	.10	.38	.....	.....	.....
								Order Three.—Dietic Dis.								
...	...	...	...	9	7	1	17	Alcoholism	.32	.32	.32	.47	.....	.....	.....	.....
2	1	...	...	2	.....	...	5	Delirium Tremens	.09	.....	.....	.10	.....	.....	.28	1.08
...	...	3	...	.....	.....	...	3	Inanition	.06	.....	.....	.....	.....	2.10	.....	.....
...	...	...	...	.....	2	...	2	Purpura	.04	.....	.09	.....	.....	.....	.....	.....
35	69	16	50	423	516	80	1,189	CLASS II.—CONSTITUTIONAL.	22.07	25.63	23.85	21.19	18.80	11.00	19.45	19.00
								Order One.—Diathetic Dis.								
...	...	...	...	.....	1	...	1	Gout	.02	.....	.05	.....	.....	.....	.....	.....
4	8	2	...	19	2	9	44	Dropsy	.82	2.88	.09	.99	.....	1.40	2.25	2.16
...	...	...	1	.....	5	...	6	Anæmia	.11	.....	.23	.....	.38	.....	.....	.....
4	8	2	3	39	44	10	110	Cancer, Various	2.04	3.25	2.03	2.03	1.13	1.40	2.25	2.16
...	1	...	1	7	15	...	24	Cancer of Breast	.44	.....	.70	.36	.38	.....	.28	.....
4	...	...	2	11	16	2	35	Cancer of Stomach	.67	.64	.75	.57	.76	.....	.....	2.16
...	...	...	...	10	13	1	24	Cancer of Uterus	.44	.32	.61	.52	.....	.....	.....	.....
1	2	...	1	11	3	1	19	Mortification	.35	.32	.14	.57	.38	.....	.56	.54
...	1	...	1	19	12	1	34	Rheumatism	.65	.32	.55	.99	.38	.....	.28	.....
								Order Two.—Tubercular Dis.								
6	4	1	3	16	27	...	57	Scrofula	1.06	.....	1.25	.83	1.13	.70	1.13	3.24
1	...	...	1	....	5	...	7	Tabes Mesenterica	.13	.....	.23	.....	.38	.....	.....	.54

TABLE X.—CLASSIFICATION AND PERCENTAGE, 1885.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.						
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Providence City.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
12	45	11	36	273	348	56	781	Phthisis (Pulmonalis)	14.45	17.93	16.11	14.20	13.53	7.70	12.70	6.48
2	...	...	...	6	8	...	16	Hydrocephalus	.31	......	.37	.31	......	......	......	1.08
1	...	...	1	12	17	...	31	Tubercular Meningitis	.58	......	.79	.62	.38	......	......	.54
94	133	65	119	707	993	109	2,222	CLASS III.—LOCAL.	41.26	34.93	45.90	36.40	44.73	45.30	37.50	50.76
								Order One.—Diseases of the Nervous System.								
...	3	...	8	9	5	2	27	Encephalitis	.50	.64	.23	.47	3.03	......	.85	......
...	6	1	8	35	61	...	111	Meningitis	2.06	......	2.82	1.82	3.03	.70	1.68	......
11	11	4	11	65	78	5	185	Apoplexy	3.44	1.62	3.61	3.38	4.16	2.80	3.10	5.94
5	7	12	1	34	32	13	104	Paralysis	1.94	4.16	1.48	1.77	.38	8.40	1.98	2.70
...	...	...	2	23	10	...	35	Insanity	.67	......	.46	1.20	.76	......	......	......
3	...	1	...	7	12	...	23	Epilepsy	.42	......	.55	.36	......	.70	......	1.62
1	1	...	...	....	1	1	4	Tetanus	.08	.32	.05	......	......	......	.28	.54
7	10	8	4	42	36	4	111	Convulsions	2.06	1.29	1.67	2.18	1.50	5.60	2.82	3.78
2	3	3	1	11	35	2	57	*Brain Diseases*	1.05	.64	1.63	.57	.38	2.10	.85	1.08

								Order Two.—Diseases of the Circulatory System.								
1	...	...	...	....	3	...	4	Aneurism	.08	......	.14	......	......	......	......	.54
13	27	7	18	94	159	31	349	*Heart Diseases*	6.48	9.94	7.35	4.89	6.76	4.89	7.61	7.02
								Order Three.—Diseases of the Respiratory Organs.								
2	...	...	2	....	5	..	9	Laryngitis	.17	......	.23	......	.76	......	......	1.08
1	2	2	7	49	52	...	113	Bronchitis, Acute	2.10	......	2.41	2.55	2.64	1.40	.56	.54
4	1	...	4	22	24	...	55	Bronchitis, Chronic	.99	......	1.11	1.14	1.50	......	.28	2.16
...	1	...	...	3	3	...	7	Pleurisy	.13	......	.14	.16	......	......	.28	......
15	21	12	22	151	227	19	467	Pneumonia	8.65	6.08	10.50	7.85	8.35	8.40	5.92	8.15
1	1	...	1	8	8	2	21	Asthma	.39	.64	.37	.42	.38	......	.28	.54
...	1	...	...	.....	......	...	1	*Lung Diseases*	.02	......	......	......	......	......	.28	......
								Order Four.—Diseases of the Digestive Organs.								
1	3	...	2	1	19	...	26	Gastritis	.48	......	.88	.05	.76	......	.85	.54
4	2	...	3	22	31	2	64	Enteritis	1.19	.64	1.43	1.14	1.13	.....	.56	2.16
6	2	...	...	11	16	...	35	Peritonitis	.67	......	.74	.57	......	......	.56	3.24
...	2	1	..	3	2	2	10	Hernia	.19	.64	.09	.16	......	.70	.56	......
...	...	...	...	4	6	...	10	Ileus	.19	......	.27	.21	......	......	......	......
...	...	...	...	1	3	...	4	Intussusception	.08	......	.14	.05	......	......	......	......
...	...	...	...	3	1	...	4	Stricture of Intestines	.08	......	.05	.16	......	......	......	......
1	2	1	1	12	4	3	24	*Stomach Diseases*	.41	.97	.19	.62	.38	.70	.56	.54
...	...	1	...	1	4	...	6	Hepatitis	.11	......	.19	.05	......	.70	......	......
...	...	...	...	3	4	1	8	Jaundice	.15	.32	.19	.16	......	......	......	......
2	6	...	5	17	16	1	47	*Liver Diseases*	.87	.32	.74	.88	1.88	......	1.70	1.08
1	3	...	1	6	3	...	14	*Bowel Diseases*	.26	......	.14	.31	.38	......	.85	.54

TABLE X.—CLASSIFICATION AND PERCENTAGE, 1885.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.						
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Providence City.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
								Order Five.—Diseases of the Urinary Organs.								
...	1	...	4	5	19	...	29	Nephritis	.54	......	.88	.26	1.50	......	.28	......
8	8	7	6	23	59	3	114	Nephria (Bright's Disease)	2.12	.97	2.72	1.19	2.25	4.90	2.25	4.32
2	5	1	1	8	2	2	21	Diabetes	.38	.64	.09	.42	.38	.70	1.41	1.08
...	...	...	...	1	.....	...	1	Calculus (Gravel, etc.)	.02	......	......	.05	......	......	......	......
...	1	1	...	2	6	2	12	Cystitis	.22	.64	.27	.10	......	.70	.28	......
...	...	...	...	1	2	1	4	Prostate, Disease of	.08	.32	.09	.05	......	......	......	......
...	1	...	...	13	10	2	26	*Kidney Diseases*	.48	.64	.46	.67	......	......	.28	......
1	...	...	...	2	4	1	8	Bladder, Diseases of	.15	.32	.19	.10	......	......	......	.54
								Order Six.—Diseases of the Generative Organs.—Female.								
...	...	...	2	.....	4	2	8	Ovarian Dropsy	.15	.64	.19	......	.76	......	......	......
...	...	...	1	5	.....	...	6	*Diseases of Uterus*	.11	......	......	.26	.38	......	......	......
								Order Seven.—Osseous and Locomotory System.								
...	...	1	...	2	3	...	6	Bones, Diseases of	.11	......	.14	.10	......	.70	......	......

1	1	...	...	.....	3	...	5	*Joint Diseases*	.09	......	.14	......	......	......	.28	.54
1	...	1	1	9	8	5	25	Vertebræ, Diseases of	.47	1.62	.37	.46	.38	.70	......	.54
								Order Eight.—Integumentary System.								
...	1	1	3	1	13	3	22	Abscesses	.37	.96	.60	.05	1.13	.70	.28	......
...	1	...	...	.....	1	...	2	*Skin Diseases*	.04	......	.09	......	......	......	.28	......
19	67	22	52	260	199	36	655	CLASS IV.—DEVELOPMENTAL.	12.14	11.54	9.20	13.25	19.55	15.40	18.89	10.26
								Order One.—Developmental Diseases of Children.								
...	...	3	5	26	48	1	83	Atrophy	1.55	.32	2.22	1.35	1.88	2.10	......	......
3	12	...	4	60	8	6	93	Debility, Infantile	1.74	1.94	.37	3.13	1.50	......	3.38	1.62
1	6	...	3	19	10	...	39	Debility, Premature Birth	.72	......	.46	.98	1.13	......	1.69	.54
...	...	...	...	2	3	...	5	Cyanosis	.09	......	.14	.10	......	......	......	......
...	1	...	2	.....	10	2	15	Malformations	.27	.65	.46	......	.76	......	.28	......
...	3	...	2	8	16	...	29	Teething	.53	......	.74	.41	.76	......	.85	......
								Order Two.—Developmental Diseases of Women.								
...	1	...	...	4	......	...	5	Paramenia	.09	......	......	.21	......	......	.28	......
...	3	...	4	15	24	1	47	Childbirth	.87	.32	1.11	.78	1.50	......	.85	......
								Order Three.—Developmental Diseases of Old People.								
9	32	18	29	87	70	22	267	Old Age	4.95	7.05	3.25	4.52	11.02	12.60	9.02	4.86

TABLE X.—CLASSIFICATION AND PERCENTAGE, 1885.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.						
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Providence City.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
								Order Four.—Diseases of Nutrition. Adolescent and Adult.								
4	3	1	1	18	5	1	33	Atrophy	.62	.32	.23	.94	.38	.70	.85	2.16
2	6	...	2	21	5	3	39	Debility	.71	.97	.23	1.05	.76	......	1.69	1.08
7	13	9	13	122	104	21	287	CLASS V.—VIOLENCE AND OTHERWISE.	5.30	6.43	4.80	6.13	4.51	6.30	3.57	3.78
								Order One.—Accident or Negligence.								
...	2	1	1	19	26	5	54	Accident, Various	.99	1.62	1.20	.99	.38	.70	.56	......
...	1	...	2	7	14	1	25	Falls	.46	.32	.64	.36	.76	......	.28	......
...	1	...	...	6	11	1	19	Burns and Scalds	.36	.32	.52	.31	......	......	.28	......
1	...	...	...	3	4	1	9	Poison.	.17	.32	.19	.16	......	......	......	.54
3	...	2	2	15	15	4	41	Drowning	.76	1.29	.70	.78	.76	1.40	......	1.62
...	...	...	...	3	6	...	9	Suffocation	.17	......	.27	.16	......	......	......	......
1	2	...	...	4	7	1	15	Railroad	.28	.32	.32	.21	......	......	.56	.54

...	...	...	1	1	1	...	3	*Order Two.—Homicide.*	.06	......	.05	.05	.38	......	......	......
1	1	2	4	3	6	3	20	*Order Three.—Suicide.*	.37	.97	.27	.16	1.50	1.40	.28	.54
								Order Four—. Various.								
1	3	2	2	18	7	...	33	Unclassified..................	.62	......	.32	.94	.76	1.40	.85	.54
...	...	2	1	43	7	6	59	Cause not specified....	1.08	1.93	.32	2.24	.38	1.40	......	......

TABLE XI.—OCCUPATIONS AND AGES AT DEATH, 1885.

Showing the Number, the Aggregate and the Average Ages at Death of the Decedents in the several occupations, ages under twenty being excluded.

OCCUPATIONS.	STATE OF RHODE ISLAND.		
	Number of Decedents.	Aggregate Age.	Average Age.
I. TILLERS OF THE SOIL.			
Farmers and Farm Laborers	201	13,376	66.54
Florists	3	140	46.66
Gardeners	7	374	53.45
	211	13,890	65.83
II. PROFESSIONAL.			
Artists	4	185	46.25
Civil Engineers	2	79	39.50
Clergymen	7	506	72.28
Dentists	2	126	63.00
Lawyers	6	326	54.33
Musicians	4	202	50.50
Nurses	3	149	49.66
Physicians	9	541	60.11
Policemen	2	111	55.50
Public Officers	2	129	64.50
Teachers	3	194	64.66
	44	2,548	57.91
III. OCCUPATIONS—*Optional Activity*—AGENTS, FINANCIERS, TRADERS, &C.			
Agents	4	238	59.50
Bankers	6	285	47.50
Brokers	6	384	64.00
Contractors	10	556	55.60
Druggists	1	66	66.00

Table XI.—OCCUPATIONS, 1885.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.		
	Number of Decedents.	Aggregate Age.	Average Age.
Gentlemen of Leisure	9	518	57.55
Grocers	12	625	52.08
Hotel Keepers	5	248	49.60
Manufacturers	18	1,127	62.44
Merchants	33	2,118	64.20
Liquor Dealers	8	321	40.12
Railroad Agents, etc	2	114	57.00
Saloon Keepers	7	310	44.28
Stable Keepers	3	134	44.66
Traders and Dealers, Various	17	656	38.59
Undertakers	2	63	31.50
	143	7,763	54.28
IV.			
Occupations—Outdoor—*Local.*			
Bricklayers	2	85	42.50
Carpenters and Joiners	57	3,231	56.70
Masons	16	986	61.62
Millwrights	3	148	49.33
Ship Carpenters	2	112	56.00
Stone Cutters	3	163	54.33
Stevedores	2	82	41.00
Tanners	1	31	31.00
	86	4,838	56.25
V.			
Occupations—Indoor—*Active.*			
Bakers	4	201	50.25
Blacksmiths	15	764	50.93
Bleachers	3	127	42.33
Cabinet Makers	5	303	60.60
Carriage Makers	2	121	60.50
Confectioners	3	133	44.33
Cooks	1	62	62.00
Coopers	5	354	70.80
Dyers	2	84	42.00

TABLE XI.—OCCUPATIONS, 1885.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.		
	Number of Decedents.	Aggregate Age.	Average Age.
Foundrymen	2	86	43.00
Gaspipers	3	144	48.00
Machinists	43	2,027	50.60
Mechanics	17	936	55.06
Moulders	4	195	48.75
Painters	29	1,298	49.24
Pattern Makers	2	132	66.00
Plumbers	1	24	24.00
Superintendents and Overseers	18	1,046	58.11
Tinsmiths	6	259	43.16
Upholsterers	1	60	60.00
Wood Turners	1	67	67.00
Waiters	2	73	36.50
	169	8,496	50.24
VI.			
OCCUPATIONS—INDOOR—*Restricted Activity.*			
Barbers	6	247	41.16
Bookbinders	2	77	38.50
Bookkeepers	14	566	40.43
Carvers	2	89	44.50
Cigar Makers	6	327	54.50
Clerks and Salesmen	43	1,762	41.47
Embossers	1	41	41.00
Enamelers	3	124	41.33
Engravers	3	137	45.66
Harness Makers	2	111	55.50
Jewelers	33	1,414	42.85
Laundrymen	2	87	43.50
Operatives	77	3,776	49.04
Printers	7	274	39.14
Rubber Workers	2	49	24.50
Sail Makers	5	268	53.60
Shoemakers	17	983	58.41
Silversmiths	5	218	43.60
Tailors	15	821	54.73
Telegraphers	2	69	34.50
Wool Sorters	2	87	43.50
	249	11,527	46.30

TABLE XI.—OCCUPATIONS, 1886.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.		
	Number of Decedents.	Aggregate Age.	Average Age.
VII.			
OCCUPATIONS AT LARGE—*Active.*			
Butchers	10	552	55.20
Coachmen	6	247	41.16
Engineers and Firemen	10	489	48.90
Expressmen	7	329	47.00
Fishermen and Oystermen	7	395	56.43
Peddlers	4	237	56.25
Sea Captains	7	479	68.43
Seamen, Ordinary	11	572	52.00
Teamsters	11	552	50.18
	73	3,852	52.78
VIII.			
WITHOUT SPECIAL TRADES.			
Hostlers	10	423	42.30
Janitors	2	71	35.50
Laborers	256	10,014	39.12
Servants	3	139	46.33
Stevedores	3	102	34.00
Watchmen	8	392	49.00
	282	11,141	39.50
IX.			
WOMEN.			
Cooks	5	242	48.40
Domestics	40	1,642	41.05
Dressmakers and Seamstresses	7	264	37.71
*Housekeepers	176	9,666	54.92
Milliners	2	59	29.50
Nurses	3	178	59.33
Operatives	26	711	27.34
Tailoresses	7	178	25.43
Teachers	7	348	49.71
Waitresses	2	49	24.50
	275	13,337	48.50

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* Engaged wholly or partially in their own work, and not including decedents in Providence city.

TABLE XI—RECAPITULATION BY CLASSES.

OCCUPATIONS.	STATE OF RHODE ISLAND.		
	Number of Decedents.	Aggregate Age.	Average Age.
I.			
TILLERS OF THE SOIL	211	13,890	65.83
II.			
PROFESSIONAL SERVICES	44	2,548	57.91
III.			
AGENTS, FINANCIERS, TRADERS, &C.	143	7,763	54.28
IV.			
OCCUPATIONS—OUTDOOR—*Local*	86	4,838	56.25
V.			
OCCUPATIONS—INDOOR—*Active*	169	8,496	50.24
VI.			
OCCUPATIONS—INDOOR—*Limited Activity*	249	11,527	46.30
VII.			
OCCUPATIONS AT LARGE—*Active*	73	3,852	52.78
VIII.			
NO SPECIAL TRADES	282	11,141	39.50
IX.			
WOMEN	275	13,337	48.50
ALL CLASSES	1,532	77,392	50.52

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1885.

Ages under twenty being excluded.

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
I.																														
TILLERS OF THE SOIL.																														
Farmers and Farm Laborers	201	7	26	..	1	5	5	3	10	19	1	1	4	1	1	2	34	..	1	16	2	2	2	21	21	4	4	3	4	1
Florists	3	..	...	..	..	..	..	..	1	...	..	..	..	..	..	..	...	..	..	..	1	..	..	...	...	1	..	..	..	..
Gardeners	7	..	1	..	..	..	..	1	1	1	..	..	..	..	..	1	1	..	..	..	..	..	..	1	...	..	..	..	..	..
	211	7	27	..	1	5	5	4	12	20	1	1	4	1	1	3	35	..	1	16	3	2	2	22	21	5	4	3	4	1
II.																														
PROFESSIONAL.																														
Artists	4	..	...	..	..	..	..	..	..	2	1	..	1	..	..	..	...	..	..	..	..	..	..	...	...	..	..	..	..	..
Civil Engineers	2	..	1	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	1	..	..	..	..	..
Clergymen	7	..	1	..	..	..	..	2	..	...	..	..	..	..	..	..	...	..	..	1	..	..	..	1	2	..	..	..	..	..
Dentists	2	..	...	..	..	..	1	..	..	...	..	..	..	..	..	1	...	..	..	..	..	..	..	...	...	..	..	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1885.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
Lawyers	6	..	1	..	..	..	..	..	..	2	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Musicians	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	..	..	..
Nurses	3	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Physicians	9	..	1	..	..	..	..	..	1	2	..	..	1	..	..	..	..	..	..	1	..	..	1	2	..	..	..	..	..	..
Policemen	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Public Officers	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Teachers	3	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
	44	1	7	..	1	..	1	2	1	6	1	..	4	..	..	3	3	..	..	3	..	..	1	4	6	..	..	..	..	..
III. OCCUPATIONS—*Optional Activity*—AGENTS, ETC.																														
Agents	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..
Bankers	6	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..
Brokers	6	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	..	1	2	..	..	..	..	..
Contractors	10	2	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3	..	..	..	1	1	..	..	..	..	..

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
Druggists	1	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	...	..	..	..	..	..
Gentlemen of Leisure	9	..	2	..	..	..	..	..	1	...	..	..	..	..	..	..	...	..	..	2	..	1	..	2	1	..	..	..	..	..
Grocers	12	..	...	..	1	..	1	1	..	1	..	..	1	..	..	..	2	..	..	1	..	..	..	2	1	..	..	..	..	1
Hotel Keepers	5	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	...	..	..	1	..	..	..	...	2	..	..	..	..	..
Manufacturers	18	3	2	..	..	1	..	1	1	1	1	1	..	..	..	..	3	..	..	3	..	..	..	...	1	..	..	..	..	..
Merchants	33	..	3	..	1	..	..	1	1	3	..	..	3	..	..	..	11	..	..	1	1	..	1	2	4	..	1	..	..	..
Liquor Dealers	8	..	1	..	..	..	1	..	..	3	..	..	..	..	..	..	...	1	..	..	..	..	..	...	1	..	..	1	..	..
Railroad Agents, etc	2	..	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	..	..	..	..	..	..	...	...	..	..	1	..	..
Saloon Keepers	7	..	...	..	..	..	..	..	..	3	..	..	..	..	..	..	1	..	..	1	1	..	..	...	1	..	..	..	..	..
Stable Keepers	3	..	...	..	..	..	..	..	1	...	1	..	..	..	..	..	1	..	..	..	..	..	..	...	...	..	..	..	..	..
Traders, Dealers, etc	17	..	3	..	..	2	..	..	..	1	..	..	1	1	..	1	4	..	1	1	..	..	..	...	1	..	..	1	..	..
Undertakers	2	..	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	..	..	1	..	..	..	...	...	..	..	..	..	..
	143	7	13	..	2	3	2	3	5	17	2	1	6	2	1	1	24	1	1	16	2	2	1	8	18	..	1	3	..	1
IV. OCCUPATIONS—OUTDOOR—*Local.*																														
Bricklayers	2	..	...	..	..	..	..	..	..	...	..	..	..	1	1	..	...	..	..	..	..	..	..	...	...	..	..	..	..	..
Carpenters and Joiners	57	1	6	..	..	1	2	2	1	9	..	2	1	..	1	2	9	..	..	1	..	2	..	6	8	2	..	..	..	1

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1885.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
Masons	16	..	2	..	..	..	..	2	1	2	..	..	..	..	..	..	4	..	..	2	..	..	..	2	..	..	..	1	..	..
Millwrights	3	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Ship Carpenters	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Stone Cutters	3	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Stevedores	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Tanners	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
	86	1	9	..	..	1	2	6	2	13	..	2	1	1	2	2	14	..	..	4	..	6	..	8	8	2	..	1	..	1
V.																														
OCCUPATIONS—INDOOR—*Active.*																														
Bakers	4	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Blacksmiths	15	1	3	..	..	..	..	..	..	4	..	..	1	..	..	..	2	..	..	1	..	..	..	..	1	..	..	..	1	1
Bleachers	3	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cabinet Makers	5	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	1	..	..	..
Carriage Makers	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Confectioners	3	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
Cooks	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coopers	5	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	1	..	..	..	..	..
Dyers	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Foundrymen	2	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gaspipers	3	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Machinists	43	1	3	..	..	..	1	..	..	11	..	2	3	..	..	3	2	..	..	2	3	1	..	3	5	..	1	1	..	1
Mechanics	17	..	2	1	..	..	1	..	..	6	..	1	..	..	..	..	..	..	..	..	..	..	..	2	4	..	..	..	..	..
Moulders	4	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
Painters	29	2	2	..	..	..	1	..	..	4	..	..	1	..	1	..	4	1	1	6	..	1	..	2	2	1	..	..	..	..
Pattern Makers	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Plumbers	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Superintendents and Overseers	18	..	4	..	..	..	2	..	1	2	..	..	..	..	..	2	..	..	..	2	..	1	..	2	1	..	..	1	..	..
Tinsmiths	6	1	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Upholsterers	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood Turners	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Waiters	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	169	6	20	1	1	1	6	..	1	39	..	3	7	1	2	10	10	1	2	15	3	3	..	12	16	1	2	3	1	2

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1885.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemp-rance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
VI.																														
OCCUPATIONS—INDOOR—*Activity Restricted.*																														
Barbers	6	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Bookbinders	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Bookkeepers	14	1	..	2	..	..	..	..	..	4	..	..	..	..	..	..	1	..	..	1	..	..	..	..	2	1	1	1	..	..
Carvers	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Cigar Makers	6	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..
Clerks and Salesmen	43	..	3	..	..	..	..	..	1	24	..	..	2	..	..	2	4	..	..	3	..	..	..	..	4	..	..	..	..	..
Embossers	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enamelers	3	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Engravers	3	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Harness Makers	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Jewelers	33	1	3	..	..	..	..	..	..	17	..	..	..	..	..	..	1	..	1	2	..	1	..	1	3	1	..	..	1	1
Laundrymen	2	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Operatives	77	6	4	..	1	..	1	3	2	25	..	2	1	..	..	2	8	2	1	3	1	3	2	1	4	1	1	1	1	1
Printers	7	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	1	1	..	..	..	..	1	..	..	..	..	..

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
Rubber Workers	2	..	...	..	..	..	..	..	..	...	..	1	..	..	..	..	...	..	..	..	..	..	..	...	1	..	..	..	..	..
Sail Makers	5	2	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	..	..	..	..	..	1	...	...	..	..	..	1	..
Shoemakers	17	2	2	..	..	..	..	..	..	2	..	..	..	..	..	..	4	..	..	3	..	..	..	1	2	..	..	1	..	..
Silversmiths	5	1	...	..	..	..	1	..	..	1	..	..	..	..	..	..	...	..	..	..	..	..	..	1	1	..	..	..	..	..
Tailors	15	1	...	..	..	..	..	..	..	5	..	1	..	..	..	..	2	..	1	2	..	..	2	...	...	..	1	..	..	..
Telegraphers	2	..	...	..	..	..	1	..	..	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	...	..	..	..	..	..
Wool Sorters	2	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	..	1	..	..	..	1	..	..	..	..	..
	249	15	15	2	1	..	5	3	3	87	..	5	3	1	..	5	26	2	4	15	3	6	5	7	21	4	3	3	3	3
VII.																														
OCCUPATIONS AT LARGE—*Active*																														
Butchers	10	..	1	..	..	1	..	1	..	1	1	1	..	..	1	1	...	1	..	..	..	..	..	...	1	..	..	..	..	..
Coachmen	6	1	..	..	..	..	..	..	1	3	..	..	..	..	..	..	...	..	..	..	..	..	..	..	1	..	..	..	..	..
Engineers and Firemen	10	..	...	..	..	..	1	..	..	2	..	..	..	..	..	1	1	..	..	1	..	1	..	...	3	..	..	..	..	..
Expressmen	7	..	...	..	..	..	..	..	..	3	..	..	..	..	..	..	2	..	..	..	..	..	..	...	2	..	..	..	..	..
Fishermen and Oystermen	7	..	1	..	..	..	.	..	..	...	..	..	..	..	..	1	3	..	..	..	..	1	..	...	1	..	..	..	..	..
Peddlers	4	..	1	..	..	..	..	..	..	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	1	..	..	..	1	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1885.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
Sailors	11	1	1	..	..	..	..	..	..	2	..	1	..	2	..	1	..	..	..	2	..	..	..	..	1	..	..	..	..	..
Sea Captains	7	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..
Teamsters	11	..	..	..	..	..	..	..	..	5	..	..	1	..	..	..	..	..	..	1	..	1	..	1	2	..	..	..	..	..
	73	3	8	..	..	1	1	1	1	16	1	2	1	2	1	4	8	1	..	4	..	3	..	2	12	..	..	..	1	..
VIII.																														
OCCUPATIONS—NO SPECIAL TRADES.																														
Hostlers	10	..	..	..	..	1	..	..	..	4	..	..	..	..	..	1	2	..	..	..	..	..	..	..	2	..	..	..	..	..
Janitors	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Laborers	256	16	18	1	2	4	3	12	5	59	1	8	5	2	..	13	20	2	10	11	2	5	1	13	27	4	3	5	4	..
Servants	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Stevedores	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Watchmen	8	2	..	..	..	..	..	..	..	1	..	2	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..
	282	20	18	1	2	6	3	12	5	65	1	10	5	2	..	15	23	2	10	11	2	6	1	14	30	4	3	6	4	1

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
IX.																														
WOMEN.																														
Cooks	5	..	...	..	..	..	1	..	1	2	..	..	..	..	..	..	1	..	..	..	..	..	..	...	...	..	..	..	..	..
Domestics	40	3	2	..	1	..	..	..	4	7	..	2	1	1	..	3	6	1	..	1	..	1	..	2	4	..	..	..	..	1
Dressmakers and Seamstresses	7	..	...	..	..	..	..	..	..	2	..	..	..	..	..	..	2	..	..	..	..	2	..	..	...	..	..	1	..	..
*Housekeepers	176	1	21	..	2	..	3	7	12	31	2	5	5	..	..	9	24	1	..	5	1	4	..	23	14	1	1	1	..	3
Milliners	2	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	1	..	..	..	..	1	..	...	...	..	..	..	..	..
Nurses	3	..	...	..	..	..	..	..	..	1	..	..	..	..	..	..	...	..	..	..	..	..	..	1	1	..	..	..	..	..
Operatives	26	..	1	..	..	..	..	..	1	15	..	..	..	1	..	2	3	..	..	..	..	..	..	...	...	..	..	2	..	1
Tailoresses	7	..	...	..	..	..	..	..	..	4	..	..	..	..	..	1	...	..	..	..	..	..	..	1	...	..	..	1	..	..
Teachers	7	..	...	..	..	1	..	..	..	2	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..
Waitresses	2	..	...	..	..	..	..	..	..	...	..	..	..	..	..	1	...	..	..	..	..	..	..	...	1	..	..	..	..	..
	275	4	24	..	3	1	4	7	18	64	2	7	6	2	..	17	38	2	..	6	1	8	..	28	21	1	1	5	..	5

* Engaged partially or wholly in their own work, not including decedents in Providence city.

TABLE XII Continued.—OCCUPATIONS AND CAUSES OF DEATH.—RECAPITULATION BY CLASSES.

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
I. TILLERS OF THE SOIL...........	211	7	27	..	1	5	5	4	12	20	1	1	4	1	1	3	35	..	1	16	3	2	2	22	21	5	4	3	4	1
II. PROFESSIONAL SERVICES.......	44	1	7	..	1	..	1	2	1	6	1	..	4	..	..	3	3	..	..	3	..	..	1	4	6	..	..	..	..	..
III. AGENTS, TRADERS, ETC.	143	7	13	..	2	3	2	3	5	17	2	1	6	2	1	1	24	1	1	16	2	2	1	8	18	..	1	3	..	1
IV. OCCUPATIONS—OUTDOOR.......	86	1	9	..	..	1	2	6	2	13	..	2	1	1	2	2	14	..	..	4	..	6	..	8	8	2	..	1	1	..
V. OCCUPATIONS—INDOOR—*Active*.	169	6	20	1	1	1	6	..	1	39	..	3	7	1	2	10	10	1	2	15	3	3	..	12	16	1	2	3	1	2

OCCUPATIONS.	Whole Number.	Accidents.	Apoplexy and Paralysis.	Aneurism.	Asthma.	Bladder, Diseases of.	Brain, Diseases of,	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa.	Enteritis.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart, Diseases of.	Insanity.	Intemperance.	Kidney, Diseases of.	Laryngitis.	Liver, Diseases of.	Marasmus.	Old Age.	Pneumonia.	Rheumatism.	Spine, Diseases of.	Stomach, Diseases of.	Suicide.	Tuberculosis.
VI. OCCUPATIONS—INDOOR—*Restricted Activity*	249	15	15	2	1	..	5	3	3	87	..	5	3	1	..	5	26	2	4	15	3	6	5	7	21	4	3	3	3	3
VII. OCCUPATIONS AT LARGE	73	3	8	..	..	1	1	1	1	16	1	2	1	2	1	4	8	1	..	4	..	3	..	2	12	..	..	..	1	..
VIII. NO SPECIAL TRADES	282	20	18	1	2	6	3	12	5	65	1	10	5	2	..	15	23	2	10	11	2	6	1	14	30	4	3	6	4	1
IX. WOMEN....	275	4	24	..	3	1	4	7	18	64	2	7	6	2	..	17	38	2	..	6	1	8	..	28	21	1	1	5	..	5
ALL CLASSES.................	1,532	64	141	4	11	18	29	38	48	327	8	31	37	12	7	60	181	9	18	90	14	36	10	105	153	17	14	24	14	13

RESULTS AND OBSERVATIONS, 1885.

The whole number of births recorded in the State of Rhode Island, during the year 1885, was seven thousand and twenty-eight (7,028); the whole number of marriages was two thousand four hundred and eighty-eight (2,488); and the whole number of deaths was five thousand three hundred and eighty-nine (5,389).

TABLE XIII.

Presenting the General Results of Registration in the State, during each of the last thirty-two years.

Year.	Whole Number of Births.	Still-born.	Living Births.	Marriages.	Deaths.
1854	2,105	78	2,027	1,047	1,720
1855	2,926	124	2,802	1,375	1,846
1856	2,906	183	2,723	1,535	2,042
1857	4,026	185	3,841	1,526	2,325
1858	4,263	177	4,086	1,438	2,616
1859	4,500	177	4,323	1,672	2,270
1860	4,660	167	4,493	1,748	2,686
1861	4,840	146	4,694	1,533	2,927
1862	4,125	123	4,002	1,450	2,591
1863	3,691	111	3,580	1,618	3,207
1864	3,892	138	3,754	1,844	3,360
1865	3,955	177	3,778	1,896	3,405
1866	4,902	172	4,730	2,318	2,970
1867	5,127	163	4,964	2,344	2,889
1868	5,372	212	5,160	2,285	2,912
1869	5,245	220	5,025	2,289	3,382
1870	5,215	234	4,981	2,362	3,238
1871	5,678	223	5,455	2,336	3,344
1872	6,143	202	5,941	2,537	4,247
1873	6,022	228	5,794	2,630	4,403
1874	6,466	277	6,189	2,541	4,229
1875	6,508	246	6,262	2,485	4,317
1876	6,329	224	6,105	2,253	4,116
1877	6,235	242	5,993	2,282	4,450
1878	6,714	248	6,466	2,324	4,441
1879	6,350	216	6,134	2,396	4,472
1880	6,295	192	6,103	2,769	4,829
1881	6,761	264	6,497	2,750	5,016
1882	6,825	253	6,572	2,634	5,074
1883	7,046	253	6,793	2,611	5,282
1884	7,305	272	7,033	2,558	5,141
1885	7,028	271	6,757	2,488	5,389

During the period of thirty-two years there were recorded, in Rhode Island, 169,455 births, of which number 6,398 were still-born, and 163,057 were living children.

During the same period there were recorded 67,874 marriages, or 135,748 persons married, and 115,136 deaths.

These results show that in every 26.5 births there was one still-born child, or that in every 1,000 births there were 37.7 still-born and 962.3 living children.

The same results also show that the ratio of whole number of living births to the whole number of persons married, and to the whole number of decedents, each during the same period, were as follows:

	Persons married.	Deaths.
For every 100 living births there were	83.3	70.6

By the Table on the preceding page may be seen the changes that have occurred, from year to year, in the number of births, marriages and deaths during thirty-two years. During the late war period there was a very large diminution of births, since which time the number has gradually increased, with occasional retrogressions, but not in proportion to the increase of population. The decrease in the number of marriages, during the last five years (independent of ratio to population), is very noticeable.

The number of deaths has followed a more regular progression, but not always uniform. The subject will have more extended consideration in subsequent pages.

TABLE XIV.

Comparative exhibit of Births, Marriages and Deaths in each town in Rhode Island, in each of the four years, 1882, 1883, 1884 and 1885.

TOWNS AND DIVISIONS OF THE STATE.	Births in 1882.	Births in 1883.	Births in 1884.	Births in 1885.	Marriages in 1882.	Marriages in 1883.	Marriages in 1884.	Marriages in 1885.	Deaths in 1882.	Deaths in 1883.	Deaths in 1884.	Deaths in 1885.
Barrington	27	21	20	27	8	10	11	7	10	14	16	17
Bristol	143	155	131	111	43	40	33	32	107	116	113	98
Warren	89	82	108	71	38	45	35	30	71	72	72	70
Bristol County	259	258	259	209	89	95	79	69	188	202	201	185
Coventry	105	97	95	72	26	23	19	31	87	81	82	72
East Greenwich	58	66	56	71	41	38	29	26	51	57	39	72
West Greenwich	21	22	18	23	1	5	4	2	16	11	18	12
Warwick	270	321	335	286	118	107	108	109	161	153	136	199
Kent County	454	506	504	452	186	173	160	168	315	302	275	355
Jamestown		5	10	9	2	2	1	.....	5	4	10	8
Little Compton	17	11	9	15	10	8	11	15	20	23	16	16
Middletown	26	16	33	14	8	7	2	2	7	12	14	17
New Shoreham	27	32	31	25	5	6	12	6	13	20	21	28
Portsmouth	25	29	29	27	11	16	5	7	35	27	29	32
Tiverton	63	43	53	68	23	21	23	13	39	33	44	43
Towns, Newport Co.	162	136	165	158	59	69	54	43	119	119	134	144
Newport City	501	587	570	529	137	131	134	147	297	311	274	267
Burrillville	118	100	115	93	34	26	30	31	78	86	85	75
*Cranston	128	133	134	129	29	22	19	26	109	108	109	104
Cumberland	149	176	174	200	64	71	62	58	136	146	158	176
East Providence	153	138	154	157	44	53	45	39	82	97	105	113
Foster	12	25	17	16	10	17	13	16	16	31	24	29
Glocester	46	49	39	47	17	10	20	13	22	23	31	30
Johnston	154	119	170	167	27	33	26	35	74	47	83	91
Lincoln	362	391	401	381	115	115	160	105	220	274	283	335
North Providence	22	21	24	23	2	3	3	5	19	17	16	19
North Smithfield	65	50	74	61	23	22	22	13	41	37	36	35
Pawtucket	457	527	557	530	219	214	197	254	350	390	353	434
Scituate	63	79	69	67	35	37	47	32	51	71	58	78
Smithfield	40	54	62	36	26	24	14	17	24	27	24	32
Woonsocket	457	411	447	414	166	154	157	147	344	311	282	304
Towns, Providence Co.	2,226	2,273	2,437	2,321	811	801	815	791	†1,666	†1,707	†1,742	1,855
Providence City	2,788	2,916	2,956	2,936	1,172	1,177	1,114	1,091	2,242	2,357	2,233	2,164
Charlestown	18	14	25	10	7	13	12	9	7	12	16	18
Exeter	29	22	20	13	6	17	11	9	18	19	18	19
Hopkinton	52	49	52	50	29	34	29	22	40	39	24	37
North Kingstown	86	82	80	70	23	23	23	20	55	41	50	52
South Kingstown	111	108	73	104	36	35	39	47	57	42	52	70
Richmond	23	23	27	42	4	8	10	9	15	20	16	23
Westerly	116	72	137	134	75	44	48	63	55	48	106	94
Washington County	435	370	414	423	180	174	172	179	247	221	282	313
State Institutions	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	106
Whole State	6,825	7,046	7,305	7,028	2,634	2,611	2,558	2,483	5,074	5,282	5,141	5,389

* Exclusive of deaths in State Institutions.

† Including State Institutions.

The preceding Table will show at a glance the changes that have occurred, during the last four years, in the number of each of the events of births, marriages and deaths, in each of the towns in Rhode Island.

Notwithstanding the increase of population, the number of births has decreased in most of the towns. In the aggregate of counties the difference is not so great, but there is a decrease quite noticeable in Bristol and Kent counties.

The number of marriages has also steadily fallen off in nearly every town, and in the whole State.

It will be noticed, also, that deaths, with the usual irregularity of numbers one year with another in the towns, have decreased in Bristol and Newport counties, and have increased only by small proportions in other counties, and have decreased quite largely in the city of Providence.

TABLE XV.

Births, Marriages and Deaths in Rhode Island in 1885, with the Number of Persons to each event in each of the towns and counties, and also the Excess of Births over the Deaths in each town.

TOWNS AND DIVISIONS OF THE STATE.	Population, 1885.	Births in 1885.	Of Population one Birth in every	Marriages in 1885.	Of Population one person married in every	Deaths in 1885.	Deaths of Population, one in every	Excess of Births over Deaths.
Barrington	1,394	27	51.6	7	99.5	17	82.0	10
Bristol	5,737	111	51.7	32	89.6	98	54.4	13
Warren	4,209	71	60.0	30	70.1	70	60.1	1
BRISTOL COUNTY	11,340	209	54.2	69	82.1	185	61.3	24
Coventry	4,806	72	66.7	31	77.5	72	66.7	0
East Greenwich	2,659	71	37.5	26	51,2	72	37.0	—1
West Greenwich	863	23	37.5	2	216.0	12	71.8	11
Warwick	13,286	286	46.4	109	60.9	199	66.7	87
KENT COUNTY	21,614	452	47.8	168	64.3	355	60.9	97
Jamestown	516	9	57.3	......	......	8	64.5	1
Little Compton	1,055	15	70.3	15	35.1	16	66.0	—1
Middletown	1,166	14	83.2	2	291.5	16	68.6	—3
New Shoreham	1,267	25	50.7	6	105.6	28	45.2	—3
Portsmouth	2,008	27	74.3	7	143.4	32	62.6	—5
Tiverton	2,702	68	39.7	13	104.0	43	62.8	25
NEWPORT COUNTY	8,714	158	55.1	43	101.3	144	60.5	14
NEWPORT CITY	19,566	529	37.0	147	66.5	267	73.3	262
Burrillville	5,126	3	55.1	31	82.6	75	68.3	18
*Cranston	4,725	129	36.6	26	90.9	104	45.4	25
Cumberland	7,163	200	35.8	58	61.7	176	40.7	24
East Providence	6,816	157	43.4	39	87.4	113	60.3	44
Foster	1,397	16	87.3	16	43.6	29	48.1	—13
Glocester	1,922	47	40.9	13	73.8	30	64.0	17
Johnston	7,274	167	43.5	35	103.9	91	79.9	76
Lincoln	17,229	381	45.2	105	82.0	335	51.4	46
North Providence	1,478	23	64.2	5	147.8	19	77.8	4
North Smithfield	3,077	61	50.4	13	118.3	35	87.9	26
Pawtucket	22,906	530	43.2	254	44.9	434	52.8	96
Scituate	3,606	67	53.8	32	56.3	78	46.2	—11
Smithfield	2,338	36	64.8	17	68.9	32	72.8	4
Woonsocket	16,199	414	39.1	147	55.1	304	53.3	110
*TOWNS, PROVIDENCE COUNTY	101,256	2,321	43.6	791	64.0	1,855	54.6	466
PROVIDENCE CITY	118,070	2,936	40.2	1,091	54.1	2,164	54.6	772
Charlestown	1,042	10	104.2	9	55.1	18	55.1	—8
Exeter	1,086	13	83.5	9	60.3	19	57.1	—6
Hopkinton	2,796	50	55.9	22	63.5	37	75.5	13
North Kingstown	3,894	70	55.6	20	97.3	52	75.0	18
South Kingstown	5,549	104	53.3	47	59.0	70	79.2	34
Richmond	1,744	42	41.5	9	96.9	23	75.8	19
Westerly	6,333	134	47.3	63	50.2	94	67.4	40
WASHINGTON COUNTY	22,444	423	53.1	170	66.0	313	71.7	110
STATE INSTITUTIONS	1,280	......	......	......	......	106	12.1	......

* A few births in State Institutions included, but no deaths.

In Table XV will readily be found the number of persons in each town, to every single event of birth, marriage or death in the same town.

The following summary will give a condensed exhibit of the varying proportions, in the counties, county towns and cities:

	Births. Persons to each.	Marriages. Persons to each person married.	Deaths. Persons to each.
Bristol County	54.2	82.1	61.3
Kent County	47.8	64.3	60.9
Newport County Towns	55.1	101.3	60.5
Newport City	37.0	66.5	73 3
*Providence County Towns	43.6	64.0	54.6
Providence	40.2	54.1	54.6
Pawtucket	43.2	44.9	52.8
Washington County	53.1	66.0	71.7

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* Including city of Pawtucket.

Table XVI.

Births, Marriages and Deaths in Rhode Island, in 1885, with the number of each in every 1,000 of the population of each town, and the excess of the births over the deaths in every 1,000 of the population.

TOWNS AND DIVISIONS OF THE STATE.	Population, 1885.	Births, 1885.	No. of Births per 1000 of population.	Marriages, 1885.	Persons married pr 1000 of population.	Deaths, 1885.	No. of Deaths per 1000 of population.	Excess of Births over Deaths per 1000.
Barrington	1,394	27	19.3	7	10.0	17	12.2	7.1
Bristol	5,737	111	19.3	32	11.2	98	17.1	2.2
Warren	4,209	71	16.6	30	14.2	70	16.5	.1
BRISTOL COUNTY	11,340	209	18.4	69	12.2	185	16.3	2.1
Coventry	4,806	72	15.0	31	13.0	72	14.8	.2
East Greenwich	2,659	71	26.6	26	19.5	72	27.0	—0.4
West Greenwich	863	23	26.6	2	4.6	12	13.9	2.7
Warwick	13,286	286	21.3	109	16.4	199	15.0	6.3
KENT COUNTY	21,614	452	20.9	168	15.5	355	16.4	4.5
Jamestown	516	9	17.4	......	.....	8	15.5	1.9
Little Compton	1,055	15	14.2	15	28.5	16	15.1	—0.9
Middletown	1,166	14	12.0	2	3.4	17	14.6	—2.6
New Shoreham	1,267	25	19.7	6	9.4	28	22.1	—2.4
Portsmouth	2,008	27	13.5	7	7.0	32	16.0	—2.5
Tiverton	2,702	68	25.1	13	9.6	43	15.8	9.3
NEWPORT COUNTY	8,714	158	18.1	43	9.9	144	16.5	1.6
NEWPORT CITY	19,566	529	27.0	147	15.0	267	13.6	13.4
Burrillville	5,126	93	18.1	31	12.1	75	14.6	3.5
Cranston	4,725	129	27.3	26	11.0	104	22.0	5.3
Cumberland	7,163	200	27.9	58	16.2	176	24.5	3.4
East Providence	6,816	157	23.0	39	11.4	113	16.6	6.4
Foster	1,397	16	11.5	16	22.9	29	20.7	—9.2
Glocester	1,992	47	24.4	13	13.5	30	15.6	8.8
Johnston	7,274	167	23.0	35	9.6	91	12.5	10.5
Lincoln	17,229	381	22.1	105	12.2	335	19.5	2.6
North Providence	1,478	23	15.6	5	6.8	19	12.8	2.8
North Smithfield	3,077	61	19.8	13	8.5	35	11.4	8.4
Pawtucket	22,906	530	23.1	254	22.3	434	19.0	4.1
Scituate	3,606	67	18.5	32	17.7	78	21.6	—3.1
Smithfield	2,338	36	15.4	17	14.5	32	13.7	1.7
Woonsocket	16,199	414	25.5	147	18.1	304	18.8	6.7
TOWNS, PROVIDENCE COUNTY	101,256	2,321	22.9	791	15.6	1,855	18.1	4.8
PROVIDENCE CITY	118,070	2,936	24.8	1,091	18.5	2,164	18.3	6.5
Charlestown	1,042	10	9.6	9	18.1	18	17.3	—7.7
Exeter	1,086	13	11.9	9	16.6	19	17.5	—5.6
Hopkinton	2,796	50	17.8	22	15.7	37	13.3	4.5
North Kingstown	3,894	70	18.0	20	10.3	52	13.3	4.7
South Kingstown	5,549	104	18.8	47	16.9	70	12.6	6.2
Richmond	1,744	42	24.1	9	10.3	23	13.2	10.9
Westerly	6,333	134	21.1	63	19.9	94	14.8	6.3
WASHINGTON COUNTY	22,444	423	18.8	170	15.1	313	14.1	4.7
STATE INSTITUTIONS	1,280	......	......	......	......	106	82.8	......
WHOLE STATE	... .	7,028	23.1	2,488	16.3	5,389	17.7	6.0

BIRTHS. PROPORTION TO POPULATION.

In a general presentation of the proportions of births, marriages and deaths to the population of each town, it has been customary to mention the towns having the largest and smallest proportion of each class of events.

In the birth list of 1885, on the preceding page, it will be found that the town of Foster had the smallest proportion, that is, 11.5 births in every 1,000 of the population, followed by Exeter with 11.9 per 1,000, and Middletown with 12.0 per 1,000 of population.

In the same list it will be found that the towns having the largest proportion are Cumberland, Cranston and Newport, in the order named, running from 27.9 births per 1,000 of population to 27 per 1,000. Newport city had for a number of years, preceding 1885, a larger proportion of births than any other locality.

The proportions of births to population in the several counties, the towns of Providence and Newport counties, the cities of Providence and Newport, and the whole State, during 1885 and the year preceding, are as follows :

	1885.	1884.	
Bristol County	18.4	22.9	births in every 1,000 of the population.
Kent County	20.9	23.3	births in every 1,000 of the population.
Newport County Towns	18.1	19.0	births in every 1,000 of the population.
Newport City	27.0	29.2	births in every 1,000 of the population.
Newport County	24.3	25.8	births in every 1,000 of the population.
Providence County Towns	22.9	23.8	births in every 1,000 of the population.
Providence City	24.8	25.1	births in every 1,000 of the population.
Providence County	23.9	24.4	births in every 1,000 of the population.
Washington County	18.8	18.5	births in every 1,000 of the population.
Whole State	23.1	24.0	births in every 1,000 of the population.

PERSONS MARRIED. PROPORTION TO POPULATION.

The figures in relation to the number of persons married in each town, in the two preceding Tables, bear but little uniform relation to the population of the towns in which they occurred. In several of the smaller towns the number of residents in those towns who went into some other town to have the marriage ceremony performed, in 1885 and preceding years, was from two to four times the number of those who were married in the towns where they resided. Some towns, therefore, had a larger marriage record than the newly-married of their own citizens furnished, and some towns a much smaller record than they were entitled to.

The proportion to the population of persons married can be more correctly shown in counties, or in cities and aggregates of towns.

The following summary will present the proportions in the manner suggested:

Bristol County	12.2 persons married in every 1,000.
Kent County	15.5 persons married in every 1,000.
Newport County Towns	9.9 persons married in every 1,000.
Newport City	15.0 persons married in every 1,000.
Providence County Towns	15.6 persons married in every 1,000.
Providence City	18.5 persons married in every 1,000.
Washington County	15.1 persons married in every 1,000.
Entire State	16.3 persons married in every 1,000.

DEATHS. PROPORTION TO POPULATION.

The death rate during 1885 was largest in the town of East Greenwich, that is, 27 in every 1,000 of population. The town of Cumberland follows with a ratio of 24.5 per 1,000 living.

The town having the smallest death rate was North Smithfield, with a proportion of 11.4 per 1,000 living. Barrington had 12.2 per 1,000. Three other towns had less than 13 per 1,000.

Below may be found a summary of the ratios of mortality, during 1885, in the cities and larger divisions of the State, and the whole State, based upon the census of 1885:

Bristol County	16.3 in every one thousand of the population.
Kent County	16.4 in every one thousand of the population.
Towns, Newport County	16.5 in every one thousand of the population.
City of Newport	13.6 in every one thousand of the population.
Newport County	14.5 in every one thousand of the population.
Towns, Providence County	18.1 in every one thousand of the population.
City of Providence	18.3 in every one thousand of the population.
City of Pawtucket	19.0 in every one thousand of the population.
Providence County	18.3 in every one thousand of the population.
Washington County	14.1 in every one thousand of the population.
Whole State	17.7 in every one thousand of the population.

It will be observed that the death rate, in proportion to population, was larger during 1885 than in 1884, by 3.7 per 1,000 living in Kent county; by 1.1 per 1,000 in Newport county towns, and in Providence county towns including Pawtucket; by 1.5 per 1,000 in Washington county, and by 1 per 1,000 in the whole State.

The proportionate mortality was less, by 1.4 per 1,000, in Bristol county; by 0.4 per 1,000 in Newport city, and by 0.6 per 1,000 in Providence city.

In the city of Pawtucket the rate was larger than in 1884 by 3.6 per 1,000.

A comparative exhibit of the relative proportions of the births, marriages and deaths in the different counties and larger towns, in 1885, may be found in the following summary:

	Births per 1000 of population.	Marriages. Persons married per 1000 of population.	Deaths per 1000 of population.
Bristol County	18.4	12.2	16.3
Kent County	20.9	15.5	16.4
Newport County, Towns	18.1	9.9	16 5
Newport City	27.0	15.0	13.6
Providence County, Towns	22.9	15.6	18.1
City of Providence	24.8	18.5	18.3
City of Pawtucket	23.1	22.3	19.0
Washington County	18.8	15.1	14.1
Entire State	23.1	16.3	17.7

TABLE XVII.

Showing the proportions of Births, Marriages and Deaths to the population, in the aggregate for the whole State, in each of the last seventeen years.

YEARS.	BIRTHS.		MARRIAGES.		DEATHS.		
	Number.	Of population one birth in every	Number.	Of population one person married in every	Number.	Of population one death in every	Deaths in every 1,000 of the population.
1869..........	5,245	41.4	2,289	47.5	3,382	64.2	15.6
1870..........	5,215	41.7	2,362	46.0	3,238	67.1	14.9
1871..........	5,678	38.2	2,336	46.5	3,444	65.0	15.4
1872..........	6,143	35.4	2,537	42.9	4,247	51.2	19.5
1873....... ..	6,022	36.1	2,630	41.3	4,403	49.4	20.3
1874..........	6,466	39.9	2,541	50.8	4,229	61.1	16.4
1875..........	6,508	39.7	2,485	52.0	4,317	59.8	16.7
1876..........	6,329	40.8	2,253	57.3	4,116	62.7	15.9
1877..........	6,235	41.4	2,282	56.6	4,450	58.0	17.2
1878..........	6,714	38.5	2,324	55.7	4,441	58.1	17.2
1879..........	6,350	43.6	2,396	57.8	4,472	61.9	16.0
1880..........	6,295	43.9	2,769	49.9	4,829	57.3	17.5
1881..........	6.761	40.9	2,750	50.3	5,016	55.1	18.1
1882..........	6,825	40.5	2,634	52.5	5,074	54.5	18.3
1883..... ...	7,046	39.2	2,611	52.9	5.282	52.4	19.1
1884..........	7,305	41.7	2,558	59.4	5,141	59.2	16.1
1885..........	7,028	43.3	2,488	61.1	5,389	56.4	17.7

TABLE XVIII.

Comparative Exhibit of Rates per 1,000 persons, of Births, Marriages and Deaths, in Rhode Island and in other States and Countries. 1860–1882.

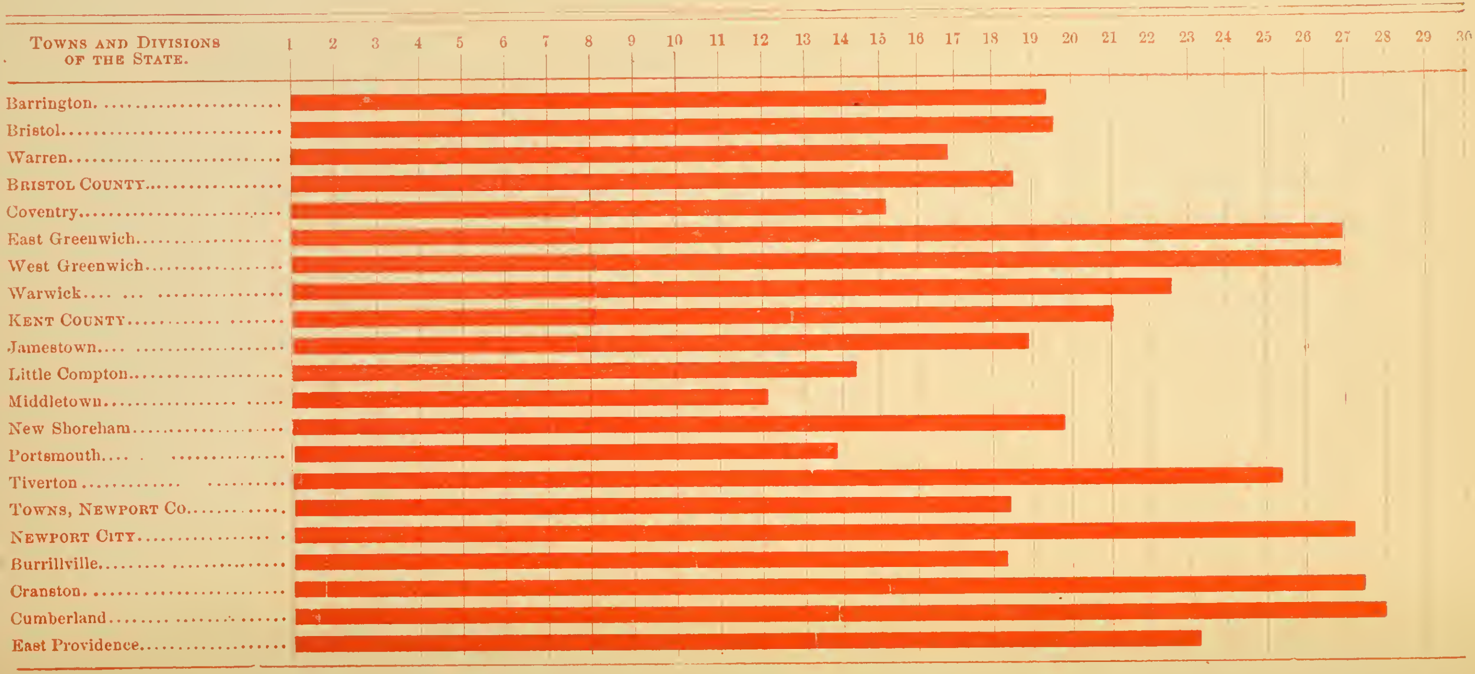
STATES AND COUNTRIES.	AVERAGE, 1860-1879.				1880.				1881.				1882.			
	Birth rate.	Death rate.	Excess of Births over Deaths per 1,000.	Marriage rate.	Birth rate.	Death rate.	Excess of Birth rate over Death rate.	Marriage rate.	Birth rate.	Death rate.	Excess of Birth rate over Death rate.	Marriage rate.	Birth rate.	Death rate.	Excess of Birth rate over Death rate.	Marriage rate.
RHODE ISLAND	25.1	16.7	8.4	20.4	22.8	17.5	5.3	20.0	24.4	18.1	6.3	19.8	24.7	18.3	6.4	19.1
Massachusetts	26.2	19.7	6.5	18.9	24.8	19.8	5.0	17.4	24.9	20.0	4.9	18.5	24.7	19.9	4.8	19.0
Vermont	20.2	15.1	5.1	15.6	20.5	15.8	4.7	16.4	20.3	16.7	3.6	16.6	19.5	16.5	3.0	17.6
Connecticut	23.8	16.3	7.5	......	22.2	16.7	5.5	15.6	22.4	17.4	5.0	15.4	23.9	18.7	5.2	17.0
Austria	39.9	30.8	9.1	17.2	37.3	29.6	7.7	15.1	38.7	30.6	8.1	19.8	38.9	30.8	8.1	20.3
Denmark	31.2	19.7	11.5	15.4	31.8	20.4	11.4	15.2	32.3	18.3	14.0	15.6	32.4	19.5	12.9	15.4
England and Wales	35.4	22.0	13.4	16.6	34.2	20.5	13.7	14.9	33.9	18.9	15.0	15.1	33.7	19.6	14.1	15.5
France *	26.0	23.6	2.4	15.9	24.5	22.8	1.7	14.9	24.9	22.0	2.9	15.0	24.8	22.2	2.6	14.8
Germany †	39.8	27.0	12.8	17.7	37.7	26.1	11.6	15.0	37.0	25.4	11.6	14.9	37.2	25.7	11.5	15.3
Hungary ‡	42.6	38.9	3.7	20.8	42.9	38.6	4.3	18.2	43.7	35.6	8.1	19.8	44.6	36.6	8.0	20.3
Italy §	37.2	29.9	7.3	15.2	33.6	30.5	3.1	13.8	38.0	27.6	10.4	16.2	37.1	27.5	9.6	15.7
Netherlands	35.4	24.6	10.8	16.2	35.6	23.6	12.0	15.0	34.9	21.5	13.4	14.6	35.3	20.7	14.6	14.3
Prussia	38.6	26.5	12.1	17.2	37.9	25.5	12.4	15.4	36.9	24.9	12.0	15.3	37.3	25.2	12.1	15.6
Sweden	31.2	19.2	12.0	13.6	29.4	18.1	11.3	12.6	29.1	17.7	11.4	12.4	29.4	17.4	12.0	12.7
Switzerland ‖	31.6	24.0	7.6	15.3	29.6	21.9	7.7	13.6	29.8	22.4	7.4	13.6	28.8	21.9	6.9	13.6
Spain ¶	37.2	29.7	7.5	15.1	......	......	......	......	......	......	......	......	......	......	......	......

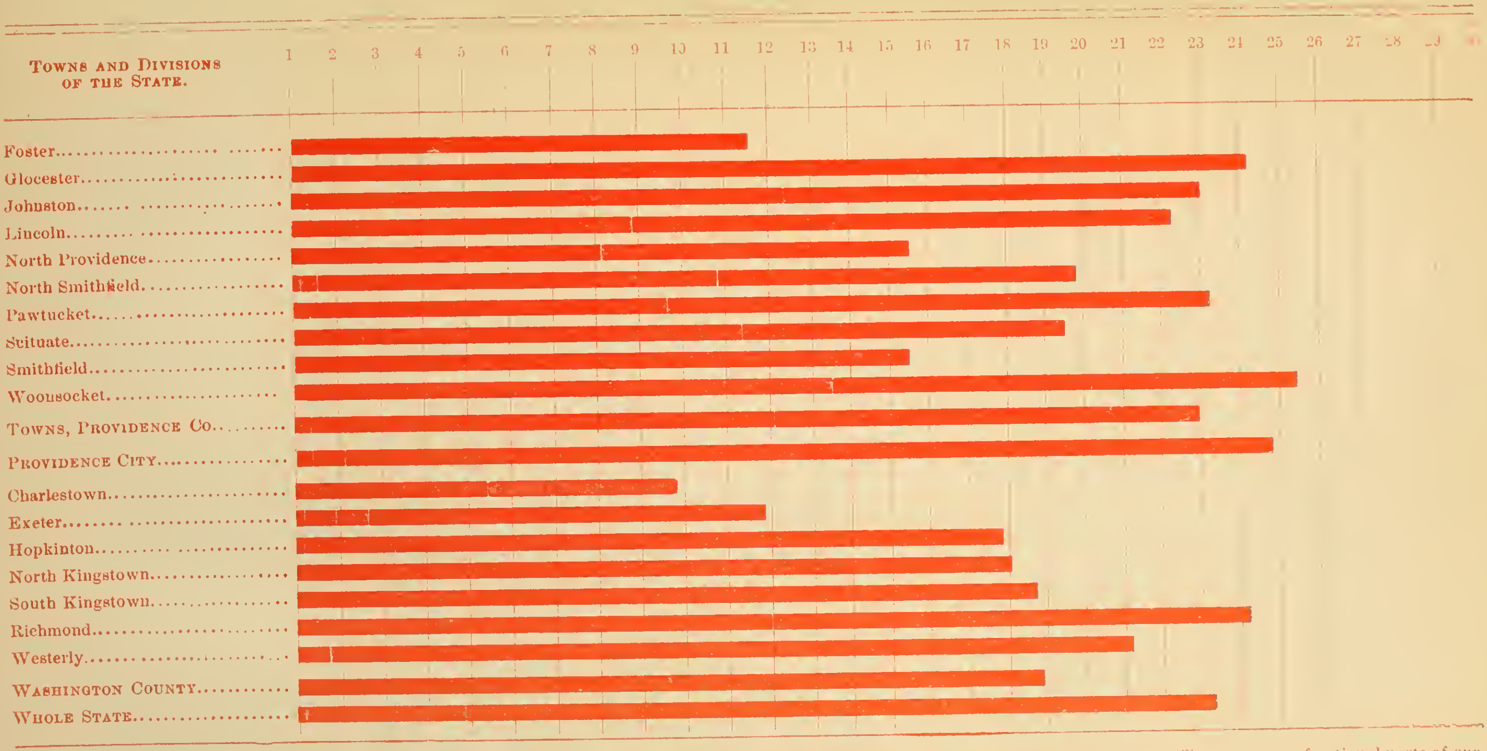
* For 19 years. † For 8 years. ‡ 13 years. § 10 years. ‖ 9 years. ¶ 17 years.

BIRTH RATES.

Diagram I.—Showing the number of births in each 1000 of the population, in each town and each county in the State, during the year 1885, computed by the Census of 1885.

For explanation see foot note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of births during the year in every 1000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington reaches across about one-third of the space between the perpendicular lines 19 and 20. It shows the birth rate of Barrington, in 1885, was about nineteen and three-tenths in every 1000 of the population, according to the census of 1885.

BIRTHS, 1885.

The general statistics of births in Rhode Island, during the year 1885, derived from the returns sent to this office, may be found on pages 2 to 6, inclusive, in Tables I, II and III.

The whole number reported is 7,028, as before stated, and is 277 less than that of 1884.

SEX OF THE CHILDREN BORN.

Of the 7,028 children whose births were reported in 1885, there were 3,591 males and 3,437 females. This gives 104.4 males to each 100 females, or 508.3 males and 491.7 females in each 1,000 children.

The following Table shows the numbers and sex, and the proportions of each sex of the children born in Rhode Island, in each of the last thirty-two years:

TABLE XIX.

Years.	Males.	Females.	Males to each 100 Females.	Per 1,000 Births, Males. Females
1854	1,081	1,003	107.8. or	518.7 and 481.3
1855	1,492	1,421	105.0, or	512 2 and 487.8
1856	1,479	1,407	105.1, or	512.5 and 487.5
1857	2,057	1,948	105 6, or	513.6 and 486.4
1858	2,200	2,053	107.2, or	517.3 and 482.7
1859	2,209	2,097	105.3, or	513 0 and 487.0
1860	2,263	2,212	102 3, or	505 7 and 494.3
1861	2,531	2,291	110.5, or	524.9 and 475.1
1862	2,152	1,967	109.4, or	522.5 and 477.5
1863	1,892	1,288	105.8, or	514 1 and 485.9
1864	1,949	1,942	100.3, or	500.9 and 499.1
1865	2,096	1,857	112.9, or	530.2 and 469.8
1866	2,546	2,356	108.0, or	519.4 and 480.6
1867	2,665	2,464	107.0. or	518.7 and 481.3
1868	2,745	2,627	104.5, or	511.0 and 489.0
1869	2,685	2,560	104.9, or	511.9 and 488.1
1870	2,679	2,536	105.6, or	513.7 and 486.3
1871	2,878	2,800	102 8, or	506.9 and 493.1
1872	3,085	3,058	100.9, or	502 2 and 497.8
1873	3,135	2,887	108 6, or	520.6 and 479.4
1874	3,311	3,155	104.9, or	512.1 and 487.9
1875	3.362	3,146	106.9, or	516.6 and 483.4
1876	3,291	3,038	108 3, or	520.0 and 480.0
1877	3,163	3,072	103.0, or.	507.3 and 492.7
1878	3,402	3,312	102.7, or	506.7 and 493.3
1879	3,259	3,091	105 4, or	513.2 and 486.8
1880	3,241	3,054	106.8, or	514 8 and 485.2
1881	3,498	3,263	107.2, or	517.3 and 482.7
1882	3,509	3,316	105.8, or	514.1 and 485.9
1883	3,548	3,498	101.4, or	503.5 and 496.5
1884	3,713	3,592	103.4, or	508.3 and 491.7
1885	3,591	3,437	104.4, or	510.9 and 489.1

There is no regularity governing the difference of increase or decrease in number of births in the entire State, from year to year, in relation to sex, except that there is always a preponderance of males.

PROPORTION OF THE SEXES.

In Table II, on pages 4 and 5, may be found the number of the children born in the different divisions of the State during the year, and in the several months of the year, with the number of each sex respectively.

The following Table will present, in a more concise manner, the whole number of children of each sex, and of both sexes, in each division, whose births were recorded during 1885, and also the number of males to each 100 females in the same:

TABLE XX.

BIRTHS, 1885.	Bristol County.	Kent County.	Newport County Towns.	Providence County Towns.*	Washington County.	Newport City.	Providence City.	Whole State.
Males	119	234	82	1,188	216	258	1,494	3,591
Females	90	218	76	1,133	207	271	1,442	3,437
Total	209	452	158	2,321	423	529	2,936	7,028
Males to each 100 females	132.2	107.3	107.9	104.8	104.3	95.2	103.6	104.4

It will be observed that Bristol county had a very large proportional excess of male births. That county has nearly always been foremost in the large male birth rates, as may be seen in the following Table.

Occasionally there will be a series of consecutive years in which there will be a preponderance of female births, as in Newport county during the last three years, and in Bristol county during 1881 to 1883, inclusive.

The following Table shows the proportions of the sexes, born during each of the last twenty-three years, in each of the larger divisions of the State, and in the whole State:

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* Including city of Pawtucket.

Table XXI.

Number of Males to each 100 Females

BIRTHS.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.	Whole State.
1863	120.0	98.4	97.0	101.8	111.4	108.7	105.8
1864	106.8	87.3	90.6	107.4	97.3	103.4	100 3
1865	119.3	118.2	108 8	118.9	113.8	88.1	112.9
1866	109.4	113 1	103.4	104.9	108.4	124.0	108.0
1867	115.5	98.3	117.8	106.3	104.5	120 4	107.7
1868	117.4	88.7	100.2	101.6	102.4	136.5	104.5
1869	115.7	116.7	102.7	98.0	107.5	120.6	104.9
1870	126.4	111.6	100.0	105 1	104.9	99.5	105.6
1871	131.8	97.9	132.5	100.8	95.2	113.3	102.8
1872	109.2	92.8	109.1	103.5	95 7	110.6	100.9
1873	129 2	113.0	117.9	104.5	109.0	104.7	108 6
1874	98.7	111.9	101.3	110.4	102.9	94.0	104.9
1875	95.2	103.1	97.7	104.3	109.1	134 3	106.9
1876	142.1	104.4	108.5	108.0	106.8	105.7	108.3
1877	138.7	102.4	98.5	100.3	104.9	95.3	103.0
1878	120.5	120.6	94.8	101.5	106.8	78.8	102.7
1879	124.3	95.5	103.6	105.4	105.7	106.3	105.4
1880	117.2	110.5	113.0	102.4	107.6	95.4	106.1
1881	91.2	111.3	102.0	105.9	109.0	115.7	107.2
1882	94.7	110.2	112.5	103.1	106.5	105.7	105.8
1883	94.0	97.6	97.0	103.5	102.2	102.2	101.4
1884	105.0	111.7	92.9	102.5	105.8	99.0	103.4
1885	132.2	107.3	98 0	104.8	103.6	104.3	104.4

The following summary will show the average number of males to each 100 females, born during the twenty-two years from 1863 to 1884, in the different divisions of the State:

Bristol County	115.1 males to each 100 females.
Kent County	104.9 males to each 100 females.
Newport County	105.1 males to each 100 females.
Providence County Towns	104.6 males to each 100 females.
Providence City	105.3 males to each 100 females.
Washington County	107.7 males to each 100 females.
Whole State	105.3 males to each 100 females.

BIRTHS AND SEASON.

In Table II, on pages 4 and 5 of this report, may be found the whole number of births as they occurred in the different months, and in the different divisions of the State, during 1885.

An examination of that Table will show that the largest number of births in any one month was in the month of December, and the largest number, in any quarter of the year, was in the fourth quarter.

This last circumstance is in accordance with the rule of thirty-two years of registration. The last quarter has almost invariably given the largest number of births.

The following Table shows the total number of children born in the State of Rhode Island, according to the returns, in each quarter of each of the last six years; and also the aggregate number and the percentage of the aggregate of each quarter in the last thirty-two years, from 1854 to 1885, inclusive:

Table XXII.

QUARTERS.	1885.	1884.	1883.	1882.	1881.	1880.	1854 to 1884, inc.	
							Number.	Per cent.
January—March	1,669	1,734	1,641	1,616	1,534	1,521	38,448	23.67
April—June...	1,736	1.755	1,668	1,622	1,661	1,483	38,304	23.58
July—September................. ..	1,768	1,868	1,893	1,711	1,746	1,640	42,457	26.14
October—December................	1,855	1,948	1,814	1,876	1,820	1,651	43,218	26.61
Whole year...	7,028	7,305	7,046	6,825	6,761	6,295	162,427	100.00

By the above Table it will be seen that, according to the registration of thirty-one years, the average proportions of births in the different quarters of the year were as follows:

January—March..	236.7 in every 1,000 births.
April—June.....	235,8 in every 1,000 births.
July—September..	261.4 in every 1,000 births.
October—December...	266.1 in every 1,000 births.

The average of the last quarter of a period of thirty-one years was about thirty more, in every thousand births, than in either the first or second three months, and scarcely five more in a thousand than in the third quarterly period.

The proportions of the births, in the different quarters of the year 1885, were as follows:

1. January—March	23.7 per cent., or	237 in every 1,000
2. April—June	24.7 per cent., or	247 in every 1,000
3. July—September	25.2 per cent., or	252 in every 1,000
4. October—December	26.4 per cent., or	264 in every 1,000
	100.0	1,000

First six months........................484 births in every one thousand.
Second six months........................516 births in every one thousand.

BIRTHS; SEX AND SEASON.

In Table II, on pages 4 and 5, will also be found the number of births of each sex by months, as they occurred in the different divisions of the State, during the year 1885. From it we ascertain the number of each of the sexes born during each quarter of the year, with their relative proportions; and also the aggregates and proportions of the same for the whole State.

The following Table will present a summary of the quarterly periods, number of births and proportions of the sexes, for the same year:

	Males.	Females.	Males to each 100 Females.	Per 1000, each quarter, Males	Females
1. January—March	885	784	113.2, or	530 and	470
2. April—June	898	838	107.1, or	517 and	483
3. July—September	877	891	98.4, or	496 and	504
4. October—December	931	924	100.4, or	502 and	498
Whole year, 1885	3,591	3,437	104.4, or	519 and	481 in every 1,000

The following Table shows the number of male children born to every 100 female children, in each quarter of the last four years; and also the proportion of births of male children to each 100 female children born, during four periods of five years each, from 1866 to 1885, inclusive:

TABLE XXIII.

YEARS.	1885.	1884.	1883.	1882.	5 years. 1881-1885.	5 years, 1876-1880.	5 years, 1871-1875	5 years, 1866-1870.
First Quarter	113.2	98.1	98.6	105.6	105.8	106.0	101.5	106.7
Second Quarter	107.1	111.4	98.7	106.1	104.8	102.7	104.7	107.3
Third Quarter........	98.4	104.6	107.5	107.4	105.1	107.1	104.8	106.0
Fourth Quarter	100.1	100.1	100.2	104.4	102.5	108.2	106.5	104.8
Total average	104.4	103.4	101.4	105.8	104.5	106 2	104.2	106.2

By the foregoing Table and summary it would appear that season has but very little influence in the causation of sex, or of any considerable difference in the number of births of either sex.

The following summary will show the proportions of the sexes born in the State in each quarter of the year, in the aggregate of a period of twenty years, preceding 1880:

	Males to each 100 Females.		Males.		Females.	
1. January—March............	...105.8,	or................	.514.1	and	485 9	in every 1,000 births.
2. April—June....................	.106 4,	or................	.515.5	and	484.5	in every 1.000 births.
3. July—September................	.104.3,	or................	.508 5	and	491.5	in every 1,000 births.
4. October—December............	106.4.	or................	.515.5	and	481.5	in every 1,000 births.
Whole Number, 20 years...........	.105.6,	or................	.513.7	and	486.3	in every 1,000 births.

PARENTAGE.

By reference to Table 1, page 2, in the division of births there will be found the parentage of the children born in Rhode Island, during the year 1885. It will be seen that of the whole number—7,028—there were 2,919 of American parentage, 2,858 foreign, and 1,251 of mixed parentage.

By mixed parentage is meant the children born of American fathers and foreign mothers, and of foreign fathers and American mothers. Of American fathers there were 578, and of foreign fathers 673.

The following Table will show the number and parentage of the children born in the State, and the variations of the same from year to year, in each of the last four years; and also the number and variations occurring in five periods of five years each, from 1858 to 1882, inclusive:

TABLE XXIV.

PARENTAGE.	1885.	1884.	1883.	1882.	5 years. 1878 to 1882.	5 years. 1873 to 1877.	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862.
American fath. and mo.....	2,919	3,064	2,941	2,915	14,169	13,431	12,214	9,712	10,609
Foreign fath and mo	2,858	2,987	2,930	2,788	13,562	13,990	12,366	9.968	9,697
American fath., for. mo ...	578	567	575	512	2,327	1,782	1,353	876	814
Foreign fath., Amer. mo...	673	687	597	610	2,887	2,357	1,720	941	755
Parentage not stated.......	....	......	....	......	....	....	....	70	223
Total......	7,028	7,305	7,046	6,825	32.945	31,560	27,653	21,567	22,098

The following Table of *percentages* will show, in a different and perhaps clearer way, the same changes that have occurred in the proportions of the births in the different classes of parentage during the last four years; and during twenty-five years, from 1858 to 1882, inclusive, in five equal periods:

TABLE XXV.

PARENTAGE.	1885.	1884.	1883.	1882.	5 years. 1878 to 1882.	5 years. 1873 to 1877.	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862.
American fath. and mo.....	41.53	41.94	41.78	42.71	43.03	42.55	44.17	45.18	48.50
Foreign fath. and mo..	40.66	40.90	41.58	40.85	41.23	44.35	44 72	46.37	44.33
American fath., for. mo....	8.23	7.76	8.16	7.50	6.95	5.84	4.89	4.07	3.72
Foreign fath., Amer. mo...	9.58	9.40	8.48	8.94	8.79	7.26	6.22	4.38	3.45
Total......	100.00	100.00	100.00	100.00	100.00	100 00	100.00	100 00	100.00

The changes in the birth rates of the two general classes of population in Rhode Island, that is, of foreign born and native American born, and also of the intermixture by marriage in the two classes, during a period of twenty-eight years, are shown in the two preceding Tables.

The increase of the proportions of births of children of mixed parentage will be noticed, those of American father and foreign mother having more than doubled, and those of foreign father and American mother having nearly trebled.

In addition to Tables XXIV and XXV, the following Table will show the percentages of children born of American and of foreign born fathers, and of American and foreign born mothers, in each of the last four years, and in each of five periods of five years each, from 1858 to 1882, inclusive:

TABLE XXVI.

CHILDREN WITH	1885.	1884.	1883.	1882.	5 years. 1878 to 1882.	5 years. 1873 to 1877.	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862.
American fathers	49.76	49.70	49 94	50.21	50.08	48 40	49.06	49.25	52.22
Foreign fathers	50.24	50 30	50 06	49.79	49.92	51.60	50.94	50.75	47.78
American mothers	51.11	51.35	50 26	51.65	51.79	49.80	50.39	49.56	51.95
Foreign mothers...........	48.89	48.65	49.74	48.35	48.21	50.20	49.61	50.44	48.05

It will be observed that of the children born, in 1885, there were more who had foreign fathers than there were of those who had American fathers. If, now, the number of children born of parents who were themselves children of foreign born parents were added, and so comprising all of foreign parentage, the proportion of children of that class, born in 1885, would be very much larger than shown in Table XXVI.

By the census of 1885 there were 38,578 married females in Rhode Island, between the ages of 15 and 45. During the same year there were 7,028 births, 40 of which were illegitimate born and 6,988 born in wedlock.

The proportion of legitimate births to the whole number of married females between the ages named was one birth to every five and five-tenths.

The number of native American married females, of the same ages (including those whose parents were foreign born), was 23,744, and of married females of foreign birth 14,834. Of the whole number of legitimate births (6,188) 3,565 were children of American mothers, and 3,423 were children of foreign mothers.

Of American mothers, the proportion of births to married females of that class, was one birth to every six and six-tenths.

Of foreign mothers, the proportion of births to foreign females married, was one birth to every four and three-tenths.

The proportions may be presented in another way, as follows:

For every 1,000 mothers of all nativities there were 18.2 births; for every 1,000 mothers in the class of American birth, (whether of foreign parentage or not) there were in that class 15.1 births; and for every 1,000 mothers in the class of foreign born there were 23.3 births.

Of the American married females 998 were colored.

BIRTHS OF COLORED CHILDREN.

The number of births of children of colored parentage reported for the year 1885 is 199. The number is larger by 14 than that of 1884.

In regard to sex, the numbers and proportions were as follows, viz: Males, 93, females, 106; or 46.7 males and 53.3 females in every 100 births; or 87.7 males to each 100 females.

The following summary will show the changes that have occurred from year to year, in the proportions of the sexes of colored children born in Rhode Island, during the last ten years:

Years.	Whole Number.	Males.	Females.	Males to each 100 females.
1876	171	64	107	59.8
1877	168	86	82	104.8
1878	172	79	93	85.0
1879	159	84	75	113.5
1880	140	75	65	115.4
1881	192	101	91	111.0
1882	179	76	103	73.7
1883	197	100	97	103.1
1884	185	91	94	96.8
1885	199	93	106	87.7

TABLE XXVII.

Showing Number, Sex, &c., of Colored Births, 1885.

TOWNS AND CITIES.	Whole Number.	Males.	Females.	COUNTIES.
Barrington	2	1	1	
Bristol	1	1		Bristol County........ 3
East Greenwich	8	2	6	
Warwick	3	1	2	Kent County.......... 11
Little Compton	1		1	
Middletown	1		1	
Newport City	43	23	20	Newport County...... 45
Cranston	1		1	
Johnston	2	1	1	
North Providence	1	1		
North Smithfield	1		1	
Pawtucket	1	1		
Scituate	1		1	
Providence City	117	55	62	Providence County....124
Charlestown	1		1	
Exeter	1	1		
Hopkinton	1		1	
North Kingstown	2	1	1	
South Kingstown	10	4	6	
Westerly	1	1		Washington County... 16
Total	199	93	106	199

NUMBER OF CHILD OF THE MOTHER.

The following Table shows the number of the child of the mother; that is, how many of the children born were reported as the first, second, or third child, etc., of their respective mothers. The statistics on this subject begin with the year 1857, and the following Table includes the children reported in 1882, 1883, 1884 and 1885, and also the total for twenty-five years, 1857 to 1881, inclusive:

TABLE XXVIII.

NUMBER OF THE CHILD OF THE MOTHER.	1882.	1883.	1884.	1885.	25 years. 1857-1881.
First	1,704	1,764	1,847	1,663	31,735
Second	1,189	1,365	1,356	1,362	26,110
Third	989	1,026	1,087	1,033	20,468
Fourth	805	822	777	767	15,423
Fifth	628	614	643	597	11.491
Sixth	481	443	472	498	8,330
Seventh	365	343	374	345	5,837
Eighth	245	245	269	282	3,996
Ninth	171	169	187	168	2,624
Tenth	93	106	103	134	1,711
Eleventh	56	64	81	73	984
Twelfth,	50	37	49	57	602
Thirteenth	30	23	32	27	308
Fourteenth	12	9	16	11	151
Fifteenth	2	7	5	7	91
Sixteenth	4	2	0	1	49
Seventeenth	0	6	4	1	29
Eighteenth	1	1	2	1	8
Nineteenth	0	0	0	1	5
Twentieth	0	0	1	0	3
Twenty-first	0	0	0	0	3
Twenty-second	0	0	0	0	2
Total	6,825	7,046	7,305	7,028	129,960

There was a considerable falling off in the proportion of first child of the mother, during 1885, and an increased proportion of the sixth and over. The proportion of all above the sixth is the largest ever recorded.

The proportion of each class to the whole number will be shown by the following Table, which gives the percentage of the children born in each of the last six years, who were respectively the first, second, third, etc., children of the mothers, and which will also give the average percentage of each class of births, during a period of ten years, from 1868 to 1877, inclusive, and of five years, 1878 to 1882, inclusive:

TABLE XXIX.

NUMBER OF THE CHILD.	1885.	1884.	1883.	1882.	1881.	1880.	5 years. 1878 to 1882.	10 years. 1868 to 1877.
First	23.66	25.28	25.03	24.96	22.92	23.50	23.1	25.2
Second	19.38	18.56	19 37	17.42	19 31	17.84	18.7	20.7
Third	14.70	14.88	14.56	14 50	15.10	16.11	16.9	15.5
Fourth	10.91	10.64	11.66	11.80	12.07	12.24	12.2	11.4
Fifth	8.49	8.80	8.71	9.17	9.35	9.23	9.1	8.4
First to Fifth	77.14	78.16	79.33	77.85	78 75	78.92	80.0	81.1
Sixth and over	22.86	21.84	20.67	22.15	21 25	21.08	20.0	18.9
Total	100 00	100.00	100 00	100 00	100.00	100 00	100.0	100.0

PLURALITY BIRTHS.

The general statistics in relation to plural births, in Rhode Island, may be found on page 6, in Table III.

There were seventy cases during the year, all of which were twins with the exception of one case of quadruplets, and making the number of one hundred and forty-two children.

Of the 142 children of plural birth, 77 were males, and 65 were females.

The cases occurred in the different divisions of the State as follows: Bristol county, 0; Kent county,8; Newport county towns, 1; Newport city, 7; Providence county towns, 22; Providence city, 28; Washington county, 4.

The following exhibit will show the parentage of children of plurality birth in Rhode Island, in 1885, and number of each:

Parents, native American, or born in the United States	54
" born in Ireland	20
" " France, or French Canadians	6
" " England	8
" " Scotland	4
" " Germany	2
" " Sweden	4
" " British America	4
" " Italy	4
American father and Irish mother	6
American father and English mother	4
American father and French mother	2
Nova Scotia father and Irish mother	2
French father and American mother	6
Irish father and American mother	8
Irish father and English mother	2
Italian father and French mother	2
English father and American mother	2
Swedish father and American mother	2
Total	142

The months in which the plurality births occurred were as follows:

January	16	April	12	July	6	October	14
February	8	May	14	August	16	November	10
March	8	June	16	September	16	December	6
First Quarter	32	Second Quarter	42	Third Quarter	38	Fourth Quarter	30
First half of year	74			Second half of year	68		
Total	142						

The general statistics of births, and number of cases reported in Rhode Islnad during a period of thirty-two years, that is, from 1854 to 1885, inclusive, are as follows:

165,856 cases of single births	giving	165,856 children.
1,769 cases of twin births	giving	3,538 children.
19 cases of triple births	giving	57 children.
1 case of quadruple births	giving	4 children.
167,645 cases of child birth	giving	169,455 children.

Of the whole number of cases of child birth (167,645) during the thirty-two years, one in 94.7 produced twins, one in 8,823 produced triplets, and one in 167,645 produced quadruplets.

Of the whole number of children born, during the same period (169,455), ascertained from the reports, one in every 47.7 was a twin, and one in every 2,973 was a triplet.

Of the 1,789 cases of plurality births which have occurred in the State during the last thirty-two years, there were 756 cases in which both parents were Americans; 850 cases in which both parents were foreign; 175 cases in which the parentage was mixed, that is, one American and one foreign parent; and 8 in which the parentage was not stated.

The whole number of children born in plurality cases, during the thirty-two years, was 3,599, of whom 1,810 were males, and 1,785 were females; the sex of the remaining four was not given.

STILL-BORN.

The whole number of still-born children reported in Rhode Island, for the year 1885, was 271; this number is 1 less than for the year 1884.

The following are the numbers reported from the different divisions of the State:

Bristol County	6
Kent County	9
Newport County Towns	3
Newport City	13
Providence County Towns	46
City of Pawtucket	8
Providence City	185
Washington County	1
Whole State	271

The following Table will give the number in each town from which still-births were reported:

Table XXX.

Still-Born, 1885. Locality, Number, Sex, Parentage and Color.

TOWNS AND DIVISIONS OF THE STATE.	Whole Number.	SEX.		PARENTAGE.		COLOR.	
		Males.	Females.	*American.	*Foreign.	White.	Colored.
Bristol	6	4	2	3	3	6	....
BRISTOL COUNTY	6	4	2	3	3	6	....
Coventry	3	1	2	3	....	3	....
East Greenwich	4	3	1	4	....	3	1
West Greenwich	1	....	1	1	....	1	....
Warwick	1	1	....	1	....	1	....
KENT COUNTY	9	5	4	9	....	8	1
Tiverton	3	1	2	....	3	3	....
TOWNS, NEWPORT COUNTY	3	1	2	....	3	3	....
NEWPORT CITY	13	6	7	6	7	12	1
Cranston	5	1	4	3	2	5	....
Cumberland	4	2	2	1	3	4	....
East Providence	6	3	3	3	3	6	....
Foster	2	1	1	2	....	2	....
Johnston	2	2	....	2	....	2	....
Lincoln	11	7	4	3	8	11	....
Pawtucket	8	3	5	4	4	8	....
Scituate	1	1	....	....	1	1	....
Smithfield	1	....	1	....	1	1	....
Woonsocket	14	7	7	6	8	14	....
TOWNS, PROVIDENCE COUNTY	54	27	27	24	30	54	....
PROVIDENCE CITY	185	106	79	85	100	175	10
South Kingstown	1	....	1	1	....	1	....
WASHINGTON COUNTY	1	....	1	1	....	1	....
WHOLE STATE	271	149	122	128	143	258	13

* By mothers.

Sex.—Of the sex of the still-born children the rule has been a large preponderance of males.

In 1884 the proportion was 190 males to every 100 females. In 1885, 122 males to every 100 females.

SUMMARY OF SEX OF STILL-BORN.

The following Table shows the number and sex of the still-born children whose births were reported in Rhode Island, during each of the last five years, and also of a period extending from January 1, 1854, to December 31, 1885:

Table XXXI.

SEX.	1885.	1884.	1883.	1882.	1881.	January 1, 1854, to Dec. 31, 1884.
Males	149	178	132	138	169	3,824
Females	122	94	121	115	95	2,674
Total	271	272	253	253	264	6,498

It will be seen that the whole number of still-births reported in the State, since January 1, 1854, is 6,498. Of the sex of this number, there were 3,824 males, and 2,674 females. The ratio of occurrence, in regard to sex, would therefore be as follows: In each 100 children there were about 59 males, and 41 females; or for every 100 females there were nearly 150 males.

Season of Still-Births.—The following summary will show the number of still-births that have been reported, in Rhode Island, during a period of thirty-two years, from 1854 to 1885, inclusive, with the months and quarters in which they occurred:

Still-Born—Thirty-two Years, 1854-1885.—Season.

January	566	April	504	July	552	October	500
February	543	May	502	August	660	November	544
March	504	June	499	September	531	December	593
First Quarter	1,613	Second Quarter	1,505	Third Quarter	1,743	Fourth Quarter	1,637

First six months, 3,118; Second six months, 3,380; Total, 6,498.

PARENTAGE OF THE STILL-BORN.

Of the 271 still-born children reported in 1885, there were 128 of American, and 140 of foreign parentage, reckoned by the nativity of the fathers, that is, the father's name given; and 130 of American and 141 of foreign, reckoned by the nativity of the mothers.

To show the changes that have occurred from year to year in the percentages of parentage of *the still-born,* reckoning by the parentage of the mothers, in contrast with the percentages of the same nativities to the *whole number of births*, reckoned by the parentage of the father, the following resumé, for various years and periods of years, is presented:

	Of Whole Number Births.		Of Whole Number Still-Born.	
Years.	American.	Foreign.	American.	Foreign.
14 years, 1859–1872	50.54 and	49.46 in each 100	41.25 and	58.75 in each 100.
10 years, 1873–1882	49.10 and	50.90 in each 100	51.84 and	48.16 in each 100.
1878	49.35 and	50.65 in each 100	55.65 and	44.35 in each 100.
1879	50.53 and	49.47 in each 100	54.63 and	45.37 in each 100.
1880	50.17 and	49.83 in each 100	54.16 and	45.84 in each 100.
1881	49.60 and	50.40 in each 100	48.10 and	51.90 in each 100.
1882	50.21 and	49.79 in each 100	50.58 and	49.42 in each 100.
1883	49.94 and	50.06 in each 100	50.98 and	49.02 in each 100.
1884	49.91 and	50.09 in each 100	49.63 and	50.37 in each 100.
1885	49.76 and	50.24 in each 100	48.00 and	52.00 in each 100.

ILLEGITIMATES.—1885.

The following Table will exhibit the number, sex, color, parentage and locality of birth of illegitimates in Rhode Island, in 1885:

TABLE XXXII.

TOWNS.	Whole Number.	SEX.		COLOR.		PARENTAGE.		Almshouses or Penal Institutions.
		Males.	Females.	Black.	White.	American.	Foreign.	
Coventry	1	1	......	......	1	1	......	......
East Greenwich	1	......	1	1	......	1	......	......
Warwick	1	1	......	......	1	......	1	......
Little Compton	1	1	......	......	1	1	......	......
New Shoreham	1	1	......	......	1	1	......	......
Tiverton	1	......	1	......	1	1	......	......
Newport City	1	......	1	1	......	1	......	......
Cranston, State Almshouse	9	4	5	......	9	2	7	9
Cumberland	1	......	1	......	1	......	1	......
East Providence	1	......	1	......	1	......	1	......
Pawtucket	1	......	1	......	1	1	......	......
Woonsocket	3	2	1	......	3	2	1	......
Providence City	18	12	6	8	10	16	2	......
Whole State	40	22	18	10	30	27	13	9

There were returns, during 1885, of 40 children of illegitimate parentage. The number is 10 less than that of 1884.

Sex.—Of the 40 there were 22 males and 18 females.

The proportions of the sexes were at the rate of 55 males and 45 females in each 100 births, or 122 males to every 100 females.

Color.—Of the 40 illegitimates born during 1885, 30 were white and 10 were colored.

The proportion, according to population, of white and colored, is about 42 whites to each person of color, and there should be, therefore, to retain the same proportion, only one illegitimate of color to 42 of white. The number of colored illegitimates, in 1884, was 8, or about 37 times as many in proportion to population as of the whites, and the number in 1885 was 10, or about 41 times as many.

Parentage.—Of the 40 illegitimates in 1885, 27 were born of American mothers, and 13 of foreign born mothers. The colored illegitimates were of American parentage. There were, of the 30 white illegitimates, 16 born of American mothers, and 13 of foreign born mothers.

The parentage given is of native born and foreign born, that is, mothers born in the United States of foreign born parents are reckoned as of American parentage.

Nine, or nearly one-quarter of the illegitimates, were born of pauper or criminal mothers, in public, charitable or penal institutions.

MARRIAGES, 1885.

The number of marriages reported in Rhode Island during the year 1885 was 2,488. This number is 123 less than in 1883, and 146 less than in 1882.

The general statistics of marriage in 1885, in relation to season and number in the different divisions of the State, may be found in Table IV, on the seventh page.

The statistics in relation to the proportion to population of persons married in 1885, in each of the towns and general divisions of the State, may be found in Tables XV and XVI, on pages 61 and 63.

The following Table will present the general statistics of marriages, and the ratio of marriage to population, in each year for a period of twenty-six years, 1860 to 1885, inclusive:

TABLE XXXIII.

YEARS.	Number Marriages.	Of population, one person married in every	Persons married pr 1,000 of population.	YEARS.	Number Marriages.	Of population, one person married in every	Persons married pr 1,000 of population.
1860	1,748	50.0	20.0	1876	2,253	57.3	17.5
1861	1,533	56.8	17.6	1877	2,282	56.6	17.7
1862	1,450	61.1	15.1	1878	2,324	55.7	17.9
1863	1,618	54.7	18.3	1879	2,396	57.8	17.5
1864	1,844	50.1	19.9	1880	2,769	49.9	20.0
1865	1,896	48.7	20.5	1881	2,750	50.3	19.9
1866	2,318	39.9	25.1	1882	2,634	52.5	19.0
1867	2,344	39.8	25.1	1883	2,611	54.4	18.3
1868	2,285	40.5	24.8	1884	2,558	58.1	17.2
1869	2,289	47.5	21.1	1885	2,488	61.3	16.3
1870	2,362	46.0	21.7				
1871	2,336	46.5	21.5	Annual Average ...		50.0	20.0
1872	2,537	42.9	23.2				
1873	2,630	41.3	24.2				
1874	2,541	50.8	19.6				
1875	2,485	52.0	19.2				

SEASON.

The following Table will show the number and percentage of marriages in Rhode Island, in each quarter of the year 1885, together with the aggregate number and percentage in each quarter for thirty years, viz., from 1854 to 1885, inclusive:

TABLE XXXIV.

MONTHS.	Number of Marriages each Month.	Number of Marriages each Quarter.	Percentage of each Quar. to total Marriages, 1885.	Number of Marriages per Quarter, 32 yrs, 1854–1885.	Perc'tage each Quarter, 32 years.
January	207	1st Quarter... 494	19.86	1st Quarter...15,073	22.20
February	165				
March	122				
April	225	2d Quarter... 606	24.36	2d Quarter ...16,921	24 92
May	172				
June	209				
July	153	3d Quarter... 576	23.15	3d Quarter ...15,801	23.27
August	187				
September	236				
October	285	4th Quarter.. 812	32.63	4th Quarter..20,099	29.61
November	299				
December	228				
Entire year	....	2,488	100.00	67,894	100.00

The largest number of marriages, in any one month during 1885, occurred in the month of November. This is in accordance with the rule for thirty-two years.

There was also an agreement with the rule of the whole period of registration in the proportions of the number of marriages, in the different quarters of the year, to the whole number during the year, which were as follows: The largest proportion, 32.63 per cent., was in the last quarter; the next largest, 24.36 per cent., was in the second quarter; followed by the third quarter, 23.15 per cent.; and the first quarter, 19.86 per cent.

The difference in the proportions of the first and fourth quarters in 1885, 12.77 per cent., is quite remarkable, the difference between the same quarters for the long period, 1854–1885, inclusive, being but 7.41 per cent.

NATIVITY OF PERSONS MARRIED.

The following Table shows the *number* of marriages, according to the nativities of the parties, for each of the last six years, and also for the aggregate of five years, from 1878 to 1882, inclusive, and of twenty years, from 1858 to 1877, inclusive:

Table XXXV.

BIRTH-PLACE.	1885.	1884.	1883.	1882.	1881.	1880.	5 years. 1878–1882. Total.	20 years. 1858–1877. Total.
United States....................	1,374	1,410	1,428	1,500	1,638	1,775	7,879	25,674
Foreign countries................	677	668	709	659	623	548	2,790	10,963
American groom, foreign bride ..	236	257	237	242	244	202	1,078	2,410
Foreign groom, American bride..	201	223	237	233	245	244	1,126	2,750
Not stated	......	......	... ..	......	......	......	....	64
Total	2,488	2,558	2,611	2,634	2,750	2,769	12,873	41,861

The preceding Table will show that the number of marriages, of which both the groom and bride were natives of the United States, has steadily decreased during the last six years, although a very considerable proportion was of the sons and daughters of foreign born parents, while the number of marriages of which both parties were foreign born has slightly increased, showing a rather larger number in 1883 than the average.

It will also be observed that the number of mixed marriages, of which one party was of American and the other of foreign birth, has decreased to some extent.

In the following Table are given the *percentages* of American, foreign and mixed marriages, in each of the last six years, and in the aggregate of five years, 1878 to 1882, inclusive, and of twenty years, 1858 to 1877, inclusive:

Table XXXVI.

BIRTH-PLACE.	1885.	1884.	1883.	1882.	1881.	1880.	5 years. 1878–1882.	20 years, 1858–1877.
United States.......................	55.22	55.12	54.69	56.95	59.56	64.10	61.25	61.33
Foreign countries..................	27.21	26.12	27.15	25.02	22.65	19.79	21.63	26.19
Mixed	17.57	18.76	18.16	18.03	17.79	16.11	17.12	12.48
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be seen by the above Table that there was a small increase in the percentage of marriages of American born persons, in 1885, and also a small increase in the percentage of marriages of foreign born. The marriages of persons of whom one was American born and the other foreign born was smaller, in proportion, than during the previous year, which was contrary to the rule of many previous years.

AGES OF PERSONS MARRIED.

The number of persons married in Rhode Island, during the year 1885, in the different periods of life, is shown in Table V, on page eight. The number of each sex, in each division of age, can also be found in the following Table:

Table XXXVII.

1885.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80	80 to 85.	85 to 90.	Not stated.
Males	65	863	752	331	189	106	65	41	36	21	11	4	3	....	1	....
Females	373	1,110	544	209	120	57	37	16	9	6	2	3	....	....	....	2
Total	438	1,973	1,296	540	309	163	102	57	45	27	13	7	3	....	1	2

The extreme of disparity of ages between the groom and bride was less in the number of years, in 1885, than in some previous years. Two grooms took brides under 20 years of age, who were respectively 26 and 29 years older than their brides. One groom of 73 years married a maid of 26 years.

On the part of the women, three brides took for husbands young men from 15 to 17 years younger than themselves, and one bride took a husband 20 years younger than herself.

The whole number of persons, in each division of ages of both sexes, married in Rhode Island, in each of the last twenty years, that is, from 1866 to 1885, inclusive, is presented in the following Table:

TABLE XXXVIII.

YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 to 85.	85 to 90.	Not stated.
1866	693	1,931	1,025	419	213	127	81	59	25	21	12	7	....	....	...	23
1867	696	1,886	1,104	416	211	148	91	48	37	18	18	5	3	1	....	6
1868	644	1,835	1,050	432	219	133	82	61	30	29	11	8	4	...	....	32
1869	642	1,814	1,051	468	227	134	79	46	35	15	11	2	3	2	....	49
1870	744	1,883	1,084	415	216	159	86	64	26	24	12	3	2	....	....	6
1871	697	1,914	1,118	392	228	115	73	56	35	22	6	7	3	....	....	6
1872	786	2,073	1,182	434	237	131	81	61	43	21	13	6	1	....	....	5
1873	762	2,177	1,156	507	253	140	87	68	35	24	12	6	6	....	....	27
1874	770	1,992	1,179	459	268	159	101	52	36	39	8	9	1	....	....	9
1875	681	2,058	1,108	475	252	150	101	60	32	29	13	4	1	....	...	6
1876	691	1,741	1,041	450	224	154	80	53	27	19	12	1	2	...	....	9
1877	631	1,745	1,118	459	244	125	92	52	46	14	15	11	2	1	...	9
1878	618	1,832	1,123	441	259	162	74	49	39	20	17	2	4	....	....	8
1879	639	1,879	1,156	481	272	123	78	56	39	26	18	9	2	2	1	11
1880	688	2,301	1,262	556	329	163	91	65	33	27	15	3	3	1	.. .	1
1881	599	2,208	1,410	547	298	187	107	54	34	31	16	5	1	1	....	2
1882	498	2,125	1,377	563	301	161	102	57	36	27	11	5	3	2	....	....
1883	497	2,108	1,370	486	319	183	115	73	31	20	14	3	2	1	....	....
1884	484	2,027	1,289	569	307	152	114	64	48	30	23	6	3	....	....	....
1885	438	1,973	1,296	540	309	163	102	57	45	27	13	7	3	....	1	2

The number of persons of both sexes contracting marriage, who have not attained the age of twenty years, has been gradually diminishing for the last twelve years.

When we take into consideration the increased population, and the increased number of marriages which would naturally result therefrom, it will be obvious that the *proportion* to the whole number of marriages must be very much less.

The following summary, continued from the previous report, will show the whole number of persons married, the number of persons married under twenty years of age, and the percentages of marriages of persons under twenty years of age, during two periods of five years each, that is, from 1870 to 1874, inclusive, and from 1880 to 1884, inclusive:

	Whole number of persons married.	Number married under twenty years of age.	Percentage of persons married under twenty years of age.
1870 to 1874	24,812	3,759	15 2
1880 to 1884	26,644	2,766	10.4

The proportion of persons, under twenty years of age, who were married during 1885, was 8.8 per cent, of the whole number of persons married during the same year.

The gradually lessening proportions of persons under twenty years of age, who assume the obligations of marriage, may also be shown by taking several years at random, as shown in the following exhibit:

Years.	Married under 20 years of age.
1870	15.9 per cent. of whole number.
1872	15.5 per cent. of whole number.
1876	15.3 per cent. of whole number.
1880	12.4 per cent. of whole number.
1883	9.5 per cent. of whole number.
1884	9.4 per cent. of whole number.
1885	8.8 per cent. of whole number.

PROPORTION OF SEX.

The following Tables will show the percentages of MALES married, in each division of ages, in each of the last twenty-six years:

TABLE XXXIX.

	YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 & over.	Total.
MALES.	1860	5 0	42.8	26.9	16.3	5.7	3.3	100.00
	1861	4.6	44.5	25.4	15.5	5.8	4.2	100.00
	1862	4.2	37.8	27.9	18.3	5.9	5.9	100.00
	1863	3.5	38.0	29.6	17.2	5.8	5.9	100.00
	1864	4.3	38.8	27.3	17.9	7 4	4.3	100.00
	1865	3.5	37.0	28.4	18.9	7.5	4.7	100.00
	1866	5.3	40.9	27.0	16.4	6.3	4.1	100.00
	1867	4.3	40.1	27.9	16.8	6.8	4.1	100.00
	1868	4.1	39.9	28.2	17.1	6.1	4.6	100.00
	1769	4.3	39 6	27.7	18.5	6.1	3.8	100.00
	1870	4.8	40.4	28.1	16.0	6.4	4.3	100 00
	1871	5.3	40.1	28.9	16.5	4.9	4.3	100 00
	1872	4.3	41.3	28.2	16.6	5.2	4.4	100.00
	1873	3.8	42.4	26.7	17.0	6.0	4.1	100.00
	1874	4.1	40 4	27.2	17.5	6.4	4.4	100.00
	1875	3.5	40.9	27.8	17.6	6.1	4.2	100.00
	1876	5.1	37.5	28.6	17.9	5.6	4.3	100.00
	1877	4.3	36.0	30.2	18.7	5.9	6.9	100.00
	1878	3.9	38.5	29 0	18.0	6.3	4.3	100.00
	1879	3.9	37.8	28.8	19.3	5.4	4.8	100.00
	1880	3.6	38.9	27.5	19.9	5.8	4.3	100.00
	1881	2.8	37.2	29.7	19.5	6.8	4.0	100.00
	1882	2.2	36.0	31.4	20.0	6.1	4.3	100 00
	1883	2.9	36.2	31.7	17.7	7.2	4.3	100.00
	1884	2.5	36.2	29.1	21.0	6.2	5.0	100.00
	1885	2.6	34.7	30.2	20.9	6.8	4.8	100.00

The following Table will show the percentages of FEMALES married, in each division of ages, in each of the last twenty-six years:

TABLE XL.

	YEARS.	Under 20.	20 to 25	25 to 30.	30 to 40	40 to 50.	50 & over.	Total.
FEMALES.	1860	25.8	44.1	17.0	9.1	2.6	1.4	100.00
	1861	29.6	42.0	15.2	7.8	4.1	1.3	100.00
	1862	24.9	41.3	16.7	11.8	4.1	1.2	100 00
	1863	24.9	42.6	16.9	9.8	4.1	1.7	100.00
	1864	24.2	43.4	17.8	10.3	2.9	1.4	100.00
	1865	22.6	43.3	19.1	11.0	3.5	1.5	100 00
	1866	24 7	42.9	17.4	11.0	2.7	1.3	100 00
	1867	25.4	40.5	19.3	10.0	3.4	1.4	100.00
	1868	24.4	40.9	18.1	11.6	3.3	1.7	100.00
	1869	24.1	40.5	18.7	12.1	3.4	1.2	100.00
	1870	26.8	39.4	17.9	10.8	3.9	1.2	100.00
	1871	24.6	41.9	19.1	10.1	3.1	1.2	100.00
	1872	26.7	40.5	18.4	9.9	2.2	1.3	100.00
	1873	25.3	40.8	17.5	12.0	2.7	1.7	100.00
	1874	26.3	38.1	19.3	11.1	3.9	1.3	100.00
	1875	23.9	42.1	16.8	11.8	4.0	1.4	100.00
	1876	25.6	39.8	17.6	12.0	3.7	1.3	100.00
	1877	23.4	40.4	18.8	12.1	3.6	1.7	100.00
	1878	22.7	40.4	19.3	12.2	3.8	1.6	100.00
	1879	22.8	40.7	19.4	12.1	3.0	2.0	100.00
	1880	21.1	44.2	18.0	12.0	3.3	1.4	100.00
	1881	19.0	43.0	21.5	11.2	3.8	1.5	100.00
	1882	16.7	44.8	20.9	12.6	3.9	1.1	100.00
	1883	16.2	44.2	20.6	13 2	4.3	1.5	100.00
	1884	16.4	43.0	21.3	13.2	4.2	1.9	100 00
	1885	14.9	44.6	21.8	13.2	3.8	1.7	100.00

In addition to the remarks previously made in regard to the ages of persons contracting marriage, it may be well to refer to Tables XXXIX and XL, an examination of which will show how largely the disposition to enter very early matrimonial alliances has changed.

On the part of the male sex, the proportion of grooms under 20 years of age has diminished 50.1 per cent., or more than one-half, since 1871, and under 25 years of age more than 18 per cent., since 1873.

On the part of the female sex, the number contracting marriage under 20 years of age has diminished in proportion more than 43 per cent., since 1872. The proportion of brides between the ages of 20 and 25 has not materially changed, but between the ages of 25 to 30 it has increased more than 23 per cent. Between the ages of 30 and 40 the proportion has also increased to some extent, but above 40 years of age the proportion remains about the same.

NUMBER OF TIMES MARRIED.

The following Table will give the number of each party who were married for the first, second, third, etc., time, in 1885:

Table XLI.

	First Marriage.	Second Marriage.	Third Marriage.	Fourth Marriage.	Fifth Marriage.
Grooms..............................	2,024	403	55	5	1
Brides	2,180	290	17	1	....

The proportion of *grooms* married for the first time, in 1885, was 81.35 per cent. of the whole number, and the proportion of *brides* married for the first time was 87.61 per cent.

MARRIAGES OF PERSONS OF COLOR.

The number of marriages of persons of color, in Rhode Island, in 1885, was 69. This includes seven marriages in each of which one of the parties was white. The number and color of the individuals were, therefore, 131 persons of color and 7 persons white. The white persons were all females. The marriages, however, may be properly classed as colored marriages.

The number reported during 1885 from the different towns, was as follows, viz.:

Providence (including 6 white brides)		50
Newport (including 1 white bride)		9
Hopkinton		2
Westerly		2
Cranston, East Providence, Pawtucket, Charlestown, North Kingstown, South Kingstown,	1 each	6
Total		69

MARRIAGES OF THE DIVORCED.

The following Table will give the names of the towns from which returns of marriage with the facts of divorce were reported, the whole number of divorced persons married, also whether the second or third marriage of the divorced groom or bride, and number of remarriages of same persons:

TABLE XLII.

TOWNS.	Whole Number.	Groom.	Bride.	Second Marriage of Groom.	Third Marriage of Groom.	Second Marriage of Bride.	Third Marriage of Bride.	Remarriages, Same Parties.
Providence City	84	33	51	28	5	50	1	1
Woonsocket	7	4	3	4	....	3	....	....
Coventry	4	3	1	3	....	1	....	....
Westerly	2	....	2	....	....	2	....	....
Cranston	1	....	1	....	....	1	....	....
North Kingstown	1	....	1	....	....	1	....	....
Total State	99	40	59	35	5	58	1	1

DIVORCES, 1885.

According to the returns made to the Secretary of the State Board of Health, by the clerks of the Supreme Courts of the different counties in Rhode Island, the number of applications for divorce, during 1885, was two hundred and ninety-three (293).

The number of divorces granted, during 1885, was two hundred and twenty-seven (227).

There were twenty-seven less applications, during 1885, than during the preceding year, and the number of divorces granted was thirty-seven less.

Divorces are decreed for the following seven statute causes, viz:

1. Adultery.
2. Extreme cruelty.
3. Wilful desertion for five years of either of the parties, or for a shorter period in the discretion of the Court.
4. Continued drunkenness.
5. Neglect or refusal to provide necessaries (having ability) for the subsistence of a wife.
6. Gross misbehavior and wickedness other than aforesaid.
7. Impotency.

Divorces are also decreed, in the discretion of the Court, for ascertained affinity, consanguinity, idiocy, insanity, penitentiary crimes, and illegal marriage.

The following Table shows the number of applications for divorce, and the number granted, in 1885, in each county of the State; also the causes alleged for the applications:

TABLE XLIII.

COUNTIES.	Number of Applications.	Number Granted.	CAUSES ALLEGED.								
			Adultery.	Extreme Cruelty.	Wilful Desertion.	Continued Drunkenness.	Neglect to Provide Necessaries, &c.	Other Gross Misbehavior.	Insanity at time of Marriage.	Illegal Marriage.	Total Causes Alleged.
Bristol	4	3	1	3	2	1	3	2	......	......	12
Kent	15	9	1	4	9	......	1	......	......	......	15
Newport	13	17	4	......	8	2	11	......	......	1	26
Providence	244	186	52	51	168	47	152	26	1	......	497
Washington	17	12	2	2	8	6	11	6	......	......	35
Whole State	293	227	60	60	195	56	178	34	1	1	585

It is seldom that a petition for divorce is brought before the courts that does not allege more than one cause why the application should be granted. In most cases it is quite probable that more than one of the statute causes does obtain, while in a considerable number the applications contain several allegations, because of the additional support they may be expected to give to the petition.

In applications on account of adultery or impotency, when proof is sufficiently complete, but one cause is usually alleged.

There were, during the year 1885, two hundred and ninety-three (293) applications for divorce, and the whole number of causes alleged was five hundred and eighty-five (585). There were, therefore, an average of two causes alleged in each application. That average is not far from the rule of many years.

The causes alleged why divorce should be granted, in the applications during 1885, were 57 less in number than in 1884, but as the number of applications was less in proportion, the average proportion of causes to each application remained the same.

In order to show the actual number of applications, and the number of divorces granted in each of the last thirteen years, the following summary is presented :

	Applications for Divorce.	Divorces Granted.	Applications refused or continued or withdrawn.
1873	261	173	88
1874	276	242	34
1875	227	158	69
1876	254	196	58
1877	257	178	79
1878	258	196	62
1879	255	246	9
1880	347	273	74
1881	350	268	82
1882	339	271	68
1883	321	257	64
1884	320	266	54
1885	293	227	66
13 years, total	3,758	2,951	807

During the last thirteen years the proportion of decrees of divorce, to whole number of applications, was 78.1 per cent. During 1883 it was 80 per cent., during 1884 it was 83.0 per cent., and during 1885 it was 78.5 per cent.

The proportion of *divorces granted*, in 1885, to the whole number of marriages during the same year, was *one divorce* to about every eleven marriages.

The proportion of *applications for divorce* to whole number of marriages, during the year, was one *application* to every eight and one-half marriages.

The following Table shows the number of divorces granted in each county, and in the whole State, in each of the last seventeen years, with the proportion of marriages to each divorce granted in each year :

TABLE XLIV.

YEARS.	Bristol County.		Kent County.		Newport County.		Providence County.		Washington County.		Whole State.	
	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.
1869	10	10.6	15	12.5	6	27.7	120	13.8	11	15 5	162	14.1
1870	3	27.7	18	11.8	6	26.3	152	11.3	21	9.3	200	11.8
1871	5	16.8	11	17.9	4	49.7	123	13.3	18	11.4	161	14.5
1872	8	10.2	13	15.7	8	22.9	149	12.6	22	8.9	200	12.7
1873	6	16.2	22	9.8	8	21.9	131	14.8	6	33.7	173	15.2
1874	10	8.9	20	8.0	6	29.0	190	10.0	16	11.6	242	10.5
1875	2	50.0	18	8.8	7	23.4	120	14.9	11	20.5	158	15.7
1876	6	14.5	15	12 8	7	20.5	148	11.1	20	8.8	190	11.5
1877	7	12.0	9	16.3	7	26.0	134	12.4	21	9.9	178	12.8
1878	4	26.0	11	13.3	13	12.8	156	10.9	12	17.3	196	11 9
1879	5	18.8	19	9.0	7	24.1	195	9.1	20	9.7	246	9.7
1880	8	12.1	23	9.4	11	17.6	208	9.7	23	17.0	273	10.1
1881	6	20.1	26	7.3	10	16.9	207	10.0	19	11.0	268	10.4
1882	6	15.0	18	10.3	15	13.0	221	8.9	11	16.2	271	9.7
1883	6	15.8	15	11.5	9	21.2	214	9.2	13	13.3	257	10.2
1884	4	16.7	20	8.0	12	15.7	209	9.3	21	8.2	266	9.6
1885	3	23.0	9	18.6	17	11.2	186	10.1	12	15.0	227	11.0

The ratio of divorces granted in the entire State, during 1885, to the whole number of marriages during the same year, was one divorce to eleven marriages. The proportion is smaller than during any year since 1878.

During the ten years 1869 to 1878, inclusive, the ratio of divorce to number of marriages was one divorce to every thirteen; during the six years 1879 to 1884, inclusive, the ratio was one divorce to every nine and nine-tenths marriages.

During the sixteen years preceding 1885 the average proportions of divorce to marriage, in the several counties and the State, have been as follows:

Bristol County	One divorce to every 18.5 marriages.
Kent County	One divorce to every 11.3 marriages.
Newport County	One divorce to every 23 0 marriages.
Providence County	One divorce to every 11.3 marriages.
Washington County	One divorce to every 13.7 marriages.
Whole State	One divorce to every 11 9 marriages.

If the divorces granted in 1885 could be compared with the number of marriages in their proper proportion in the years in which the matrimonial contract of each was consummated, it would be found that the ratio was nearer one in fourteen than one in eleven marriages.

The ratio of divorce has been larger, for the last three or four years, in consequence of the lessened number of marriages during those years. In 1880 the proportion of persons married, to the population by the census of that year, was twenty in every thousand persons. In 1885, by the census of that year, the number of persons married was sixteen and one-third in every thousand persons. While the population was larger by ten per cent. in 1885 than it was in 1880, the number of marriages was more than ten per cent. less.

It is to be remembered that the marriage of some of the divorced parties was consummated in other States, and that fact in part has given currency to the charge that the laws of Rhode Island in relation to divorce afforded unusual facilities for the annulment of the marriage contract.

Without discussion of the question of unusual facilities afforded for obtaining divorce, it may be suggested that the many delightful places of residence in Rhode Island have a charm for those hapless unfortunates who desire to forget the trials and infelicities of married life, or, possibly, some of those who chafe under the abridgment of personal liberty which matrimony imposes, and therefore the State becomes the residence of more who finally apply for divorce than would make such application were the circumstances different.

The following Table will show the Number of Marriages to every Decree of Divorce, in five of the New England States, during the years from 1876 to 1885, inclusive:

TABLE XLV.

STATES.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Rhode Island	11.5	12.8	11.9	9.7	10.1	10.4	9.7	10.2	9.6	11.0
Massachusetts	24.2	23.1	21.4	23.4	26.8	40.9	34.3	27.8	28.2	26.4
Connecticut	10.9	10.1	10.7	13.4	13.9	11.6	12.8	12.1	14.9	....
Vermont	16.0	15.0	14.0	21.0	20.0	16.0	17.8	16.4	....	....
*New Hampshire	....	....	....	....	....	9.2	10.9	12.8	10.4	....

* Marriage statistics in New Hampshire, previous to 1881, very incomplete. Marriage statistics in Maine very meagre, and afford no reliable data for comparison of marriage and divorce.

DEATHS, 1885.

The number of deaths registered in Rhode Island, during 1885, according to the returns made to the State Registrar, was five thousand, three hundred and eighty-nine (5,389).

This number is larger by 248 than that of the year 1884, and an increase of 107 over that of 1883. It is the largest ever recorded in the State.

The death rate (seventeen and seven-tenths in every 1,000 living persons) was about eight-tenths of one in excess of that of the previous year, and about two-tenths of one in excess of the previous census year.

The following summary will show the death rates per 1,000 for each of the last six census years:

1860.	1865.	1870.	1875.	1880.	1885.
15.4	18.4	14.9	16.7	17.5	17.7

On the following page will be found the death rates by counties, for twenty- six years:

TABLE XLVI.

Death rates per 1,000 living, by counties, in each of twenty-six years, from 1860 to 1885, inclusive; also the average rate of each period of five years each, from 1860 to 1884, inclusive, for the whole State.

YEARS.	Bristol.	Kent.	Newport.	Providence.	Washington.	State.	STATE. ANNUAL AVERAGE OF FIVE-YEAR PERIODS, 1860–1884.
1860	16.4	13.7	13.7	17.7	12 6	15.4	..16.5 per 1,000 living.
1861	18.9	17.5	16.9	16.9	14.1	16.8	
1862	13.8	14.6	13.1	15.1	10.6	14.3	
1863	13.0	13.0	27.5	18.9	10.5	18.1	
1864	20.2	18.1	19.6	18.5	12.8	18.1	
1865	22.8	16.1	17.5	19.2	14.2	18.4	..16.5 per 1,000 living.
1866	19.2	14.2	17.3	16.6	11.4	16.1	
1867	17.0	15.1	15.0	16.4	10.9	15.6	
1868	15.7	13.7	14.7	17.0	10.4	15.7	
1869	17.9	16.7	13.2	16.0	12.8	15.6	
1870	15.5	13.5	14.1	15.5	12.0	14.9	..17.2 per 1,000 living.
1871	16.3	17.5	12.2	15.9	12.3	15.4	
1872	21.1	16.1	14.5	21.2	14.7	19.1	
1873	18.4	13.8	19.0	22.0	15.1	20.2	
1874	14.7	13.2	10.8	17.7	13.7	16.3	
1875	14.9	14.9	13.5	17.5	15.5	16.7	..16.6 per 1,000 living.
1876	14.7	11.7	13.5	16.8	15.9	15.9	
1877	18.2	13.1	12.4	18.7	12.8	17.2	
1878	17.5	14.2	13.7	18.3	13.0	17.2	
1879	13.2	15.1	14.8	17.2	11.1	16.2	
1880	19.2	14.9	14.5	18.5	12.7	17.5	..18.0 per 1,000 living.
1881	17.9	16.5	15.7	19.3	11.9	18.1	
1882	16.5	15.3	17.2	19.7	11.0	18.4	
1883	17.7	14.6	17.7	20.8	9.8	19.1	
1884	17.7	17.1	14.5	17.8	12.6	16.9	
1885	16.3	16.4	14.5	18.5	14.0	17.7	

Annual average, twenty-five years..........17 0 per 1,000 living.

SEX OF DECEDENTS.

Of the 5,389 persons whose deaths were returned, during the year 1885, 2,607 were males, and 2,782 were females; the ratio standing at 93.7 males to each 100 females, or 484 males and 516 females in each 1,000 decedents.

The following Table will show the number and proportion of males and females among the *decedents* in Rhode Island, during the ten years 1853 to 1862, inclusive; also in each of the twenty-two years from 1863 to 1885, inclusive, and for the entire period of twenty-three years:

Table XLVII.

DEATHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853-1862	10,930	11,269	96.9
1863	1,621	1,586	102.2
1864	1,633	1,727	92.4
1865	1,686	1,719	98.1
1866	1,497	1,473	101.5
1867	1,442	1,447	99.7
1868	1,413	1,499	94.3
1869	1,696	1,686	100.6
1870	1,588	1,650	96.2
1871	1,621	1,723	94.1
1872	2,118	2,129	99.4
1873	2,166	2,237	95.5
1874	2,111	2,118	99.7
1875	2,108	2,209	95.4
1876	1,969	2,147	91.7
1877	2,132	2,318	92.0
1878	2,161	2,280	94.8
1879	2,183	2,289	95.4
1880	2,366	2,463	96.0
1881	2,367	2,559	96.8
1882	2,487	2,587	96.5
1883	2,627	2,655	99.0
1884	2,486	2,655	93.6
1885	2,607	2,782	93.7
33 years	57,115	59,197	96.6

The following Table of births, during the same period of time as the preceding, will show by comparison the different proportions of the sexes in the two classes of events:

TABLE XLVIII.

BIRTHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853–1862	18,377	17,260	106.4
1863	1,892	1,788	105.8
1864	1,949	1,942	100.3
1865	2,096	1,857	112.9
1866	2,546	2,356	108.1
1867	2,655	2,464	107.7
1868	2,745	2,627	104.5
1869	2,685	2,560	104.9
1870	2,679	2,536	105.6
1871	2,878	2,800	102.8
1872	3,085	3,058	100.9
1873	3,135	2,887	108.6
1874	3,311	3,155	104.9
1875	3,362	3,146	106.9
1876	3,291	3,038	108.3
1877	3,163	3,072	103.0
1878	3,402	3,312	102.7
1879	3,259	3,091	105.4
1880	3,241	3,054	106.1
1881	3,498	3,263	107.2
1882	3,509	3,316	105.8
1883	3,548	3,498	101.4
1884	3,713	3,592	103.4
1885	3,591	3,437	104.4
33 years	87,610	83,109	105.4

SEASON AND MORTALITY.

The whole number of decedents, and the sex of the same, in each month of the year 1885, and in each division of the State, may be found in Table VI, on the ninth page.

The influence of season upon mortality may be further illustrated by the following Table, which shows the number and percentage of deaths in each quarter of each of the last five years, and in the aggregate for thirty-one years, 1853 to 1883, inclusive:

Table XLIX.

SEASON.	1885.		1884.		1883.		1882.		1881.		1853-1883.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
January-March.	1,433	26 59	1,111	21.61	1,246	23.59	1,180	23.23	1,236	24.62	24,814	23.46
April-June.....	1,237	22.95	1,111	21.61	1,321	25.00	1,186	23.24	1,171	23.34	22,239	21.02
July-September	1,575	29.22	1,512	29.41	1,471	27.84	1,443	28.42	1,424	28.38	30,457	28.79
October-Dec...	1,144	21.24	1,407	27.37	1,244	23.57	1,265	25.11	1,185	23.66	28.272	26.73
Total..........	5,389	100.00	5,141	100.00	5,282	100.00	5,074	100.00	5,016	100.00	105,782	100 00

The proportions of mortality in 1885, in the first and last quarters of the year, were quite remarkable if not entirely unprecedented. In the first quarter the ratio was about five per cent. *larger* than in 1884, and about three per cent. larger than the average of thirty-one years. In the last quarter the ratio was more than five per cent. *smaller* than in the preceding year, and five and one-half per cent. smaller than the annual average of thirty-one years.

TABLE L.

Showing the months in the order of largest mortality, for eight years.

1885.		1884.		1883.		1882.		1881.		1880.		1879.		1878.	
1. July	587	August	542	July	537	August	589	August	576	July	488	January	468	December	421
2. August	518	October	518	August	499	November	461	January	439	August	430	August	452	August	420
3. March	499	September	514	April	475	September	444	July	434	March	426	December	395	July	410
4. January	492	December	457	January	452	July	410	October	426	January	422	October	391	January	400
5. April	483	July	456	May	445	May	406	April	417	October	416	November	388	March	396
6. September	470	November	432	October	443	December	405	September	414	April	400	July	383	November	377
7. February	442	April	416	March	442	April	401	May	410	May	392	March	382	February	362
8. December	404	March	389	September	435	October	399	March	401	September	388	April	342	April	350
9. May	397	January	378	December	409	January	398	February	396	December	377	September	339	September	345
10. October	376	May	369	June	401	February	392	December	385	February	368	February	335	October	342
11. November	364	February	344	November	392	March	390	November	374	November	365	May	318	June	310
12. June	357	June	326	February	352	June	379	June	344	June	357	June	279	May	308
	5,389		5,141		5,282		5,074		5,016		4,829		4,472		4,441

August and July are the months in which occur the largest number of deaths in a series of years. Occasionally, from the prevalence of some virulent epidemic in the larger centres of population, some other month may, for that year, show the largest mortality.

An examination of Table L will show that the months other than July and August are quite variable, from year to year, in the proportion of deaths that occur in them respectively.

PARENTAGE OF DECEDENTS.

The number of decedents, in 1885, of the two general classes of parentage, that is, American and foreign, may be found in Table I, on pages 2 and 3.

Of the whole number of decedents, 5,389, reported in 1885, 2,765 were of American, and 2,624 were of foreign parentage.

By the term "foreign parentage" is meant the decedents whose fathers were born in some other country and not in the United States. The grandchildren of foreign born grandfathers are not reckoned as of foreign parentage, if their own fathers were born in the United States.

The following six towns reported a larger number of decedents of foreign parentage than of American: Warren, Cumberland, Lincoln, Pawtucket, Woonsocket, and Providence city. Also the State Institutions in Cranston.

The six towns reporting a larger number of decedents of foreign parentage than of American, had the following proportions of the same:

Cranston (State Institutions)	194 of foreign parentage to each 100 of American.
Cumberland	245 of foreign parentage to each 100 of American.
Lincoln	378 of foreign parentage to each 100 of American.
Pawtucket	136 of foreign parentage to each 100 of American.
Woonsocket	245 of foreign parentage to each 100 of American.
Providence City	113 of foreign parentage to each 100 of American.
Warren	126 of foreign parentage to each 100 of American.

The following Table gives the number and proportion in every one thousand deaths of decedents of American and of foreign parentage, in each of the last five years; and in the aggregate for twenty-five years, or from 1858 to 1882, inclusive:

TABLE LI.

PARENTAGE.	1885.		1884.		1883.		1882.		1881.		1858-1882.	
	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.
American......	2,765	513.8	2,485	483.4	2,652	502.1	2,429	478.7	2,482	494.8	59,760	553.6
Foreign........	2,624	486.2	2,656	516.6	2,630	497.9	2,645	521 3	3,534	505.2	48,193	446.4
Total..........	5,389	1000.0	5,141	1000.0	5,282	1000.0	5,074	1000 0	5,016	1000.0	107,953	1000.0

AGE OF DECEDENTS.

In Table I, on pages 2 and 3, may be found the aggregate and average age of all the decedents whose deaths occurred in 1885, and with the age of each sex, in each town and county in the State.

By that Table it will be seen that the average age of all the male decedents in the State, in 1885, was 33.53 years, and that the average age of all the female decedents, in the same year, was 35.60 years.

The average age of all decedents, of both sexes, in the same year, was 34.59 years.

The average age of all the decedents in the State, in 1885, was about ten months larger than the average in 1884.

The following Table will present, separately, the average age of the male and female decedents, and the average age of all decedents, in each year for twenty-six years; also the average age in five periods of five years each, 1860–1884:

Table LII.

YEARS.	Average Age of Males.	Average Age of Females.	Average Age of All.	Average Age, 5-year periods, 1860-1884.
1860	28 51	30.70	29 64	
1861	26.95	30.58	28.82	
1862	29.64	32.65	31.15	29.71
1863	28.29	30.86	29.56	
1864	28.13	30.43	29.40	
1865	26.38	28.97	27.69	
1866	31 13	35.07	33 09	
1867	32.16	35.86	34.01	31.58
1868	30.47	35.08	32.85	
1869	28.62	31 29	30.25	
1870	31.02	32.75	31.90	
1871	32.57	34.43	33 52	
1872	28.41	31.15	29.77	30.30
1873	26 18	28 62	27 42	
1874	28.03	31.66	28.86	
1875	29.72	32.75	31.27	
1876	31 47	33.21	32.37	
1877	29.25	31.56	30.45	31.29
1878	29.02	31.11	30 09	
1879	31.29	33.24	32.29	
1880	29 62	32.06	30.86	
1881	30.99	34.07	32.55	
1882	31 33	35.57	33.50	33.24
1883	33 64	37.44	35.55	
1884	32.29	35.12	33.76	
1885	33.53	35.60	34 59	

Table LII shows an actual advance in the average longevity of the decedents of Rhode Island, during the last twenty-six years.

The increase, taking periods of five years together, has kept about an even pace between the sexes. There was an increase of one year from the third five-year period to the fourth, and an increase of nearly two years from the fourth period to the fifth, the years in each period included wholly.

The following Table will present some of the facts of the preceding as occurring in the different divisions of the State, instead of the State at large. It will show the average age of the decedents in each of the larger divisions of the State, in each of the last five years, and also the average of each of five periods of five years each, comprising the twenty-five years from 1858 to 1882, inclusive:

TABLE LIII.

DIVISIONS OF THE STATE.	1885.	1884.	1883.	1882.	1881.	1878–1882, 5 years	1873–1877, 5 years.	1868–1872, 5 years.	1863–1867, 5 years.	1858–1862, 5 years.
Bristol County	42 14	37.62	39 24	39.31	37.74	36.68	33.61	35.12	34.78	35.56
Kent County	34.78	39.21	41.36	39.73	34 46	37.11	36.20	34.77	35 81	32.15
Newport County	44.08	40.20	40.66	37.00	40.03	39.21	40.68	40.04	33.54	35.01
Providence County Towns	32.41	32.52	34.56	31.83	30.35	30.60	28.46	25.26	29.16	28.44
Providence City	33.81	31.51	33.18	31.88	30 98	29.50	27.19	25.45	28.50	25.78
Washington County	42.61	42.13	47.42	40.32	41.13	41.01	41.14	39.67	30.87	34.21
Whole State	34.59	33.76	35.55	33.50	32.55	31.84	30.28	31.66	30.75	29 42

PERCENTAGE OF DECEDENTS BY DIFFERENT AGES.

In Table VII, on pages 10 to 15, inclusive, will be found the number of deaths in 1885, in each town and each county, of each sex, and in each period of life, with the percentage of the whole number of deaths in each division to the population of the same, by the census of 1885.

The following Table shows the percentages of decedents in each division of ages, to whole number of deaths, in each of the last six years, and in the aggregate for three periods; one of ten years and seven months, from June 1st, 1852, to December 31st, 1862, inclusive; one of ten years, from 1863 to 1872, inclusive; and one of ten years, from 1873 to 1882, inclusive:

Table LIV.

Periods of Life.	1885.	1884.	1883.	1882.	1881.	1880.	10 years. 1873 to 1882.	10 years. 1863 to 1872.	10 years, 7 months. 1852 to 1862.
Under 1 year	18.8	20.1	18.1	19.7	18.5	18.4	18.9	18.0	17.6
1 and under 2..........	5.2	5.6	5.1	5.3	6.4	7.0	7.6	7.8	9.8
2 and under 5..........	6.1	6.6	4.1	6.5	7.9	9.2	8.4	7.9	9.6
Total under 5..........	30.1	32.3	27.6	30.5	32.8	34.6	34.9	33.7	37.0
5 and under 10.........	3.3	3.5	3.4	3.7	4.6	6.2	5.0	4.6	5.0
10 and under 20.........	5.6	4.8	5.4	5.8	5.2	4.8	5.8	6.2	5.8
20 and under 30.........	8.6	9.2	10.3	10.6	9.6	8.6	9.2	9.7	9.5
30 and under 40.........	7.9	8.1	8.4	9.3	8.0	7.6	7.8	8.1	8.7
40 and under 50.........	7.7	7.2	7.6	7.6	7.6	6.6	6.9	7.2	7.5
50 and under 60.........	8.1	8.1	9.0	7.3	8.2	6.7	7.2	7.3	6.7
60 and under 70.........	10.4	9.1	9.2	8.4	8.8	8.5	8.2	8.3	6.9
70 and under 80.........	10.4	9.5	10.5	9.7	8.6	9.4	8.8	8.4	7.3
80 and under 90.........	6.2	6.9	6.5	5.6	5.4	5.7	5.1	5.4	4.6
Over 90 and not stated..	1.7	1.3	2.1	1.5	1.2	1.3	1.1	1.1	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

It will be noticed that the decedents under one year of age have not varied much in proportion to the whole number of deaths, during thirty-three years, the average holding at about eighteen in every one hundred. An occasional year only may vary one or two per cent.

Between the ages of one and five a considerable decrease has occurred during these years, in the proportionate mortality. During the first period of ten years the ratio was 19.4 per cent; during the second period it was 15.7 per cent.; in the third period it was 16.0 per cent.; and during the last three years the annual average has been 10.9 per cent., a decrease of 8.5 per cent. from 19.4 per cent., or nearly 44 per cent. less than the average of the first decade in the Table.

No less a change has occurred in the proportion of the decedents of fifty years of age and over, in the increased ratio of mortality.

The following Table will present the varying proportions of deaths to whole number of deaths, in four different periods of life, from 50 years of age to 90 years, grouped in three periods of ten years each, and one period comprising the last three years, 1883–1885.

TABLE LV.

AGE OF DECEDENTS.	1st Decade.	2d Decade.	3d Decade.	Last 3 Years.
50 to 60	6.7 per cent.	7.3 per cent.	7.2 per cent.	8.4 per cent.
60 to 70	6 9 "	8.3 "	8.2 "	9.6 "
70 to 80	7.3 "	8.4 "	8.8 "	10.1 "
80 to 90	4.6 "	5.4 "	5.1 "	6.5 "

The natural result of a lessened proportion of deaths in the earlier periods of life would be a larger proportion of living persons in the later periods, and consequently an increased death rate, because of the larger proportional number liable to extinction of life.

By the preceding Tables and previous remarks it will be seen that the period of life during which there has been an increasing exemption from death extends from one year of age to ten, and that the increased proportional mortality in consequence thereof has not been in the middle periods of life, but in the classes that have attained the age of fifty years and over.

COLORED DECEDENTS.

By the State census of 1885 there were 7,342 persons of color in Rhode Island. In 1880, by the United States census, there were 6,592. The enumerations of both censuses include persons of all shades of color of African, Aboriginal or Mongolian blood. The percentage of increase during the five years was rather larger than that of the white population, or above eleven per cent. During the five years there were of that class 952 births and 867 deaths. The excess of births over deaths during that period was 85. The increase of number of that class must, therefore, have been in a very large measure the result of immigration from other States and countries. Of Chinese and Japanese there was an increase of six only.

There were 183 decedents of persons of color in Rhode Island, in 1885.

The localities in which they occurred, and number in each, were as follows:

Providence City		120
Newport City		18
Cranston (including State Institutions)		10
East Greenwich, Warwick, City of Pawtucket, South Kingstown, Westerly,	5 each	25
Bristol		3
East Providence		2
Tiverton, Coventry, Charlestown, Exeter, Richmond,	1 each	5
Total		183

Sex.—There were, of the 183 decedents of color, 88 males and 95 females.

Season.—The 183 deaths were in the different months as follows:

Months.	Deaths.	Months.	Deaths.	Months.	Deaths.	Months.	Deaths.
January	16	April	18	July	16	October	10
February	16	May	19	August	14	November	15
March	13	June	20	September	16	December	10
First Quarter	45	Second Quarter	57	Third Quarter	46	Fourth Quarter	35

First six months, 102; Second six months, 81; Total, 183.

The following summary will show the proportions, to the whole colored population, of each of the events of birth, marriage and death of colored persons, during the eight years from 1878 to 1885, inclusive:

	One birth in every	One person married in every	One death in every
1878	36.4	39.2	40.2
1879	39.6	51.4	37.3
1880	47.1	43.3	44.0
1881	34.3	39.2	35.4
1882	36.8	44.5	45.4
1883	33.4	63.3	39.7
1884	34.8	46.0	34.5
1885	36.7	51.7	40.1

In every one thousand of the colored population there were, in 1885:

Of Births.	Married.	Of Deaths.
27.2	19.3	25.0

The following exhibit will show the number of births, marriages and deaths among the colored population of Rhode Island, during 10 years, 1861 to 1870, inclusive, and in each of the last fifteen years, from 1871 to 1885, inclusive, and also the aggregates of the same:

10 years, 1861-1870	1,131 births	557 marriages	1,153 deaths.
1871	146 births	64 marriages	116 deaths.
1872	171 births	76 marriages	184 deaths.
1873	163 births	69 marriages	160 deaths.
1874	170 births	80 marriages	151 deaths.
1875	156 births	76 marriages	169 deaths.
1876	170 births	59 marriages	156 deaths.
1877	168 births	64 marriages	160 deaths.
1878	172 births	80 marriages	156 deaths.
1879	159 births	61 marriages	168 deaths.
1880	140 births	76 marriages	153 deaths.
1881	192 births	84 marriages	186 deaths.
1882	179 births	74 marriages	145 deaths.
1883	197 births	52 marriages	166 deaths.
1884	185 births	70 marriages	187 deaths.
1885	199 births	69 marriages	183 deaths.
Last 15 years	2,567 births	1,054 marriages	2,440 deaths.
Total, 25 years	3,698 births	1,611 marriages	3,593 deaths.

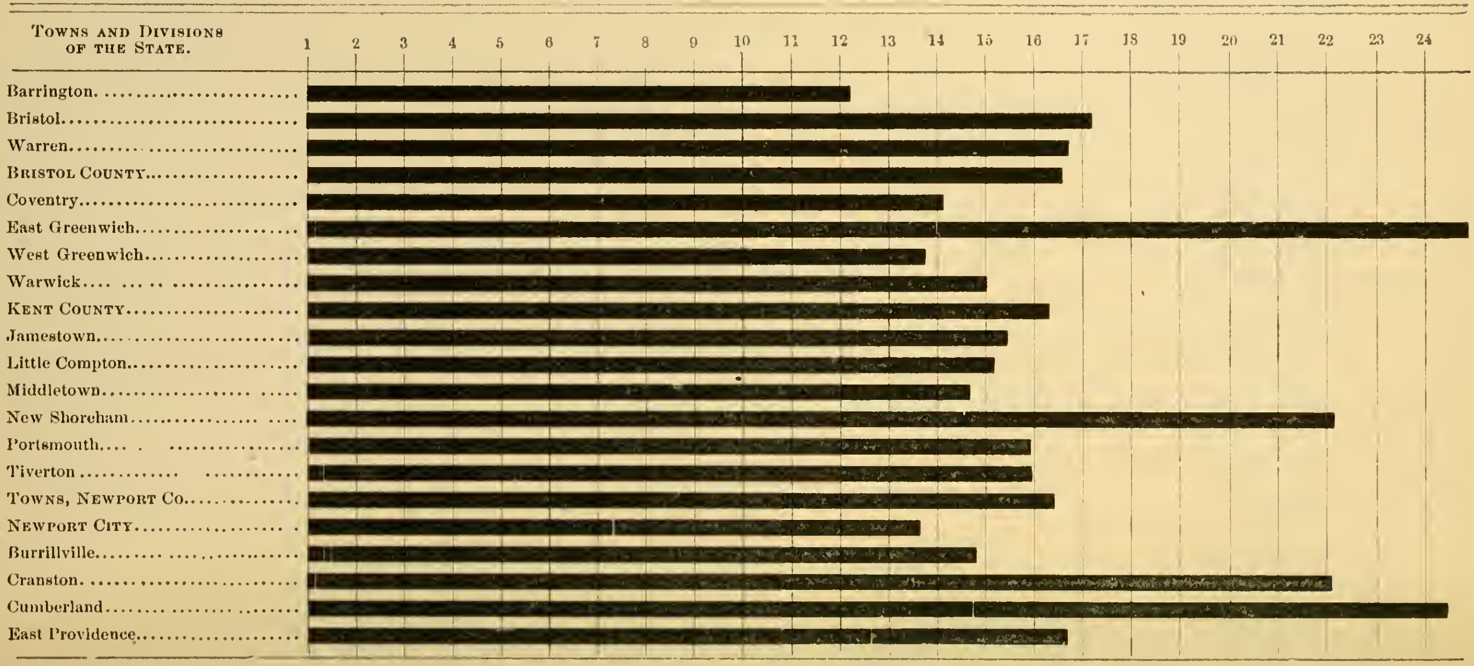
Excess of births over deaths, twenty-five years 127

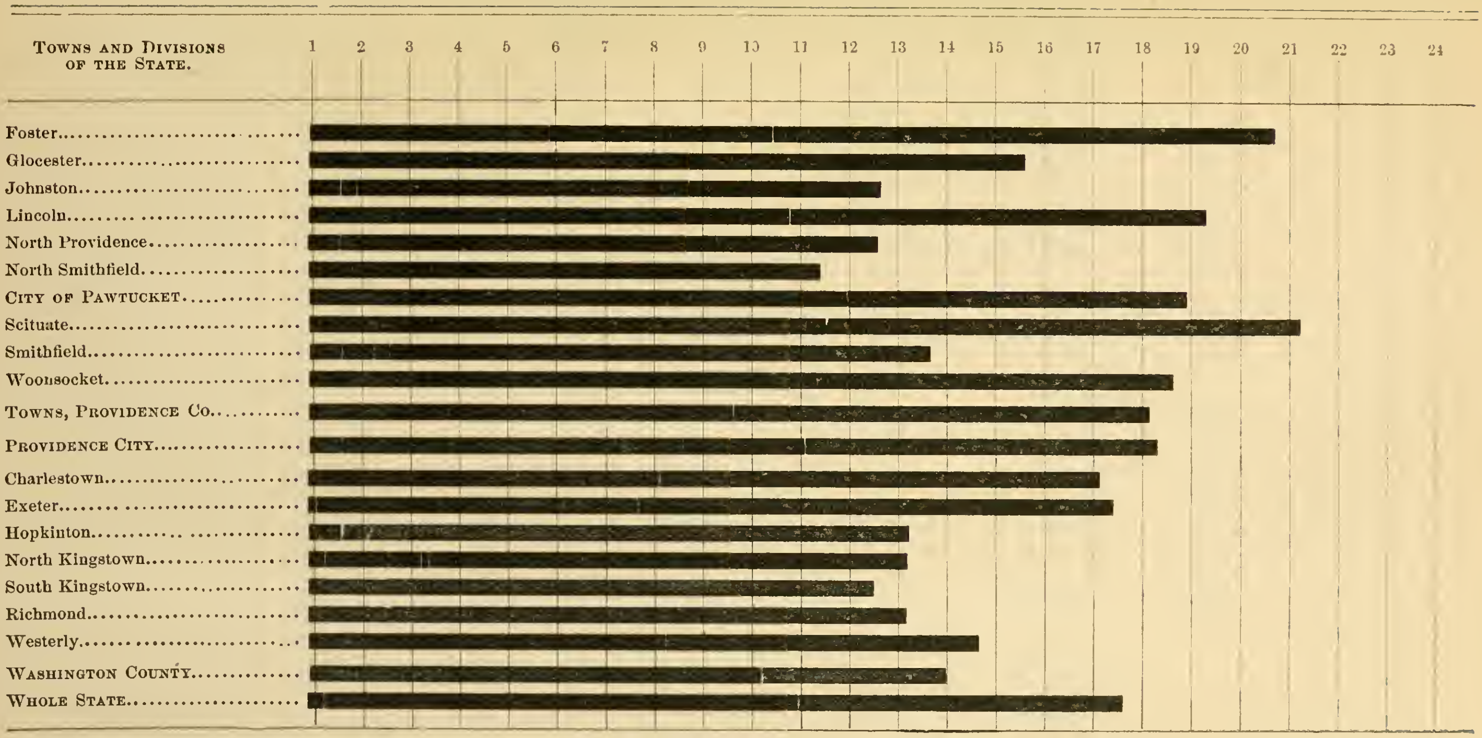
An average excess of births over deaths of about five each year.

DEATH RATES.

Diagram II.—Showing the number of deaths in each 1000 of the population, in each town and each county in the State, during the year 1885, computed by the Census of 1885.

For explanation see foot note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of deaths during the year in every 1000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington reaches about one-fifth of the way across the space between the perpendicular lines 12 and 13. It shows the death rate of Barrington, in 1885, was about twelve and one-fifth in every 1000 of the population, according to the census of 1885.

CAUSES OF DEATH, 1885.

The statistics of the causes of death in Rhode Island, in 1885, may be found in Tables VIII, IX, X and XII. The whole number of deaths, as previously stated, was 5,389. The number of which the cause of death was reported was 5,330, and the number of which the cause was not stated was 59.

The following Table shows the number of deaths in 1885, in each large division of the State, and the number and proportion in each division from which causes were reported unknown:

Table LVI.

1885.	Bristol County.	Kent County.	Newport County Towns.	Providence County Towns.	Washington County.	Newport City.	Providence City.	Whole State.
Number of deaths............	185	355	144	1,961	313	267	2,164	5,389
Cause not stated.............	....	....	2	43	6	1	7	59
One in.......................	....	....	72.0	45.6	52.2	267.0	309.1	91.3

TABLE LVII.

Showing the proportion of deaths reported, with "cause unknown," in each division of the State, and in the whole State, in each of the last twenty-three years, from 1863 to 1885, inclusive.

YEARS.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.	Whole State.
1863, One in every	16.5	11.2	25.5	6.9	46.7	24.7	14.7
1864. One in every	57.0	12.6	11.6	8.5	45.7	47.6	16.1
1865, One in every	64.3	27.4	13.4	8.2	55.0	32.9	16.4
1866, One in every	163.0	11.4	22.4	9.5	45.0	23.3	17.3
1867, One in every	....	13.6	34.5	7.4	64.0	14.3	14.8
1868, One in every	32.3	5.0	20.3	5.2	46.2	10.1	10.1
1869, One in every	41.2	5.8	52.8	5.3	83 6	16.1	11.3
1870, One in every	....	19.3	23.6	11.8	90.2	26.9	23.6
1871. One in every	151.0	81.2	7.9	8.4	83.6	9.8	13.0
1872, One in every	13.3	5.8	10 0	6.8	72.8	9.8	11.3
1873, One in every	....	16.0	25.4	9.8	102.5	27.5	20.3
1874. One in every	54.0	15.2	14.0	17.2	73.7	21.2	27.8
1875. One in every	55.0	7.4	15.6	13.7	91.2	11.9	20.9
1876, One in every	11.5	7.9	18.5	9.9	124.3	22.8	19.3
1877, One in every	....	17.7	9.7	11.9	323.0	16.0	23.2
1878, One in every	32.1	7.4	9.0	13.7	124.2	21.7	21.1
1879, One in every	16.6	9.2	12.4	9.5	225.1	8.6	17.6
1880, One in every	21.9	23.5	13.5	10.5	122.3	17.8	20.7
1881, One in every	204.0	13.0	11.2	7.3	143.0	6.5	14.4
1882, One in every	37.6	11.6	10.9	10.6	187.0	7.7	18.8
1883, One in every	40.4	15.9	15.0	15.3	392.8	17.0	28.4
1884, One in every	100.0	40.0	81.6	91.7	372.1	94.0	122 4
1885, One in every	....	....	137.0	45.6	309.1	52.2	91.3

The average annual proportion of deaths in the whole State, reported with cause unknown during the first ten of the above twenty-three years, that is, from 1863 to 1872, inclusive, was one in every 14.8; or 67.6 in every one thousand decedents.

The average annual proportion of the same during the last ten years, that is, from 1876 to 1885, inclusive, was one reported cause unknown in every 37.7 deaths; or 26.5 in every one thousand decedents.

It will be seen that the proportional number, during the last ten years, was but little more than one-third of the proportional number of the first ten.

TABLE LVIII.

Showing the order in regard to number and proportion of decedents from thirteen principal causes of death.

1885.		1884.		1883.		1882.		1881.		1880.		June 1st, 1852, to Dec. 31st, 1882—30 yrs. 7 mos.		Per 1,000 of whole No. of deaths, 30 years, 7 months.
Whole Number....	5,389	Whole Number....	5,141	Whole Number....	5,282	Whole Number....	5,074	Whole Number....	5,016	Whole Number . .	4,829	Whole Number..	101,230	
	—		—		—		—		—		—		—	—
Consumption	781	Consumption	739	Consumption	766	Consumption	737	Consumption	706	Consumption	642	Consumption.....	16,025	158.3
Pneumonia and Conges. of Lungs.	467	Pneumonia and Conges. of Lungs.	363	Pneumonia and Conges. of Lungs.	400	Pneumonia and Conges. of Lungs.	344	Pneumonia and Conges. of Lungs.	327	Scarlatina..........	468	Pneumonia and Conges. of Lungs	6,099	60.2
Heart, Diseases of..	349	Cholera Infantum..	325	Heart, Diseases of..	325	Cholera Infantum..	325	Heart, Diseases of..	264	Pneumonia and Conges. of Lungs.	364	Old Age...........	5,408	53.4
Apoplexy and Paralysis.........	289	Apoplexy and Paralysis	298	Apoplexy and Paralysis	275	Old Age............	283	Old Age............	247	Old Age	273	Cholera Infantum.	5,143	50.8
Cholera Infantum..	279	Old Age	293	Old Age	275	Apoplexy and Paralysis	265	Cholera Infantum..	240	Cholera Infantum..	247	Scarlatina..........	4,398	43.4
Old Age	267	Heart, Diseases of..	285	Fevers, Typhoid, &c	258	Heart, Diseases of..	255	Diphtheria.........	216	Heart, Diseases of..	231	Dysentery and Diarrhœa........	4,310	41.5
Brain, Diseases of..	189	Diarrhœa and Dysentery........	194	Cholera Infantum..	242	Fevers, Typhoid, &c....	229	Brain, Diseases of..	179	Apoplexy and Paralysis	215	Heart, Diseases of.	3,947	39.0
Cancers............	193	Accidents..........	180	Diarrhœa and Dysentery	184	Brain, Diseases of..	173	Apoplexy	146	Fevers, Typhoid, &c....	158	Fevers, Typhoid, &c	3,755	37.1
Accidents	173	Fevers, Typhoid, &c.	165	Brain, Diseases of..	179	Accidents..........	166	Cancers	145	Diphtheria	152	Apoplexy and Paralysis	3,527	34.8
Fevers.............	158	Cancers............	156	Cancers............	169	Dysentery and Diarrhœa	158	Fevers, Typhoid, &c	143	Accidents	137	Accidents (all kinds)	3,018	30.8
Diarrhœa and Dysentery	120	Brain, Diseases of..	148	Accidents..........	155	Cancers............	132	Accidents..........	142	Convulsions, &c ...	133	Diphtheria*.... ..	2,949	*29.1
Diphtheria.........	99	Convulsions........	139	Convulsions........	126	Convulsions.......	121	Scarlatina..........	138	Cancers............	125	Convulsions and Fits.......	2,203	21.7
Scarlet Fever	91	Diphtheria..... ...	119	Diphtheria	95	Diphtheria.........	101	Dysentery and Diarrhœa	119	Dysentery and Diarrhœa	98	Croup...........	2,013	19.8

*25 years, 1858 to 1882, inclusive.

Consumption is in all years not only the leading cause of death, but as such cause has a mortality, in a series of years, more than twice that of any other cause.

Pneumonia is, with very rare exceptions, the second most important cause of death. In 1885 the decedents from pneumonia were not only larger in number than ever recorded in any previous year, but were larger in proportion to the whole number of decedents.

The other causes of death presented in Table LVIII vary, in proportion to deaths from all causes, very considerably from year to year.

The number of deaths from cancer are largely in excess of any previous year. The mortality from cancer has increased more rapidly than the increase of population during the last five years.

The subject of proportion and increase of mortality, from different causes of death, will have more extended consideration in subsequent pages.

TABLE LIX.

A summary of Deaths in Rhode Island in 1885, from twenty leading causes, showing the Number, Sex, Parentage, Season, Ages and localities.

		Accidents.	Apoplexy and Paralysis.	Brain, Diseases of.	Bronchitis.	Cancer.	Cholera Infantum.	Consumption.	Croup.	Diarrhœa.	Diphtheria.	Dysentery.	Fevers, Typhoid, &c.	Heart, Diseases of.	Hooping Cough.	Kidneys, Disease of.	Liver, Disease of.	Old Age.	Pneumonia and Congestion of Lungs.	Scarlatina.	Stomach, Diseases of.
Number of decedents from each cause..		173	289	189	168	193	279	781	94	84	99	36	158	349	42	159	47	267	465	91	24
SEX.	Males.	135	144	98	82	52	150	382	45	44	47	17	71	162	23	92	19	86	214	36	9
	Females.	38	189	91	86	141	129	399	49	40	52	19	87	187	19	67	28	181	251	55	15
PAR'AGE.	American	72	183	94	91	114	128	315	42	35	48	16	70	198	24	86	27	183	271	48	13
	Foreign	101	106	95	77	79	151	466	52	49	51	20	88	151	18	73	20	84	194	13	11
SEASON.	January.	24	28	16	14	21	4	70	19	3	12	...	16	38	5	7	2	28	57	19	3
	February.	17	32	19	17	14	2	59	7	2	8	...	13	25	3	12	2	33	54	12	1
	March.	15	28	16	19	10	3	62	7	4	7	1	7	34	4	15	11	26	82	24	1
	April.	10	19	16	25	12	3	71	9	1	5	1	6	31	5	11	5	24	84	10	2
	May.	11	28	11	11	12	2	73	6	3	6	3	4	30	2	13	2	20	54	2	3
	June	10	24	17	16	16	5	70	5	3	4	4	7	22	1	12	4	19	27	1	....
	July.	13	22	19	11	28	127	76	1	22	11	5	9	26	1	19	5	21	7	3	4
	August	13	24	17	14	22	86	53	...	26	6	10	17	24	8	21	2	25	13	3	....
	September	19	22	11	5	17	32	75	1	11	9	6	27	31	7	19	4	20	12	4	3
	October	14	20	19	12	14	6	52	8	6	8	4	24	33	4	11	1	14	22	3	...
	November	15	18	11	15	13	6	63	11	....	17	1	17	30	1	8	4	22	17	3	3
	December	12	24	17	9	19	3	57	20	3	16	1	11	25	1	11	5	15	36	7	4

TABLE LIX.—Continued.

A summary of Deaths in Rhode Island in 1885, from twenty leading causes, showing the Number, Sex, Parentage, Season, Ages and Localities.

		Accidents.	Apoplexy and Paralysis.	Brain, Diseases of.	Bronchitis.	Cancer.	Cholera Infantum.	Consumption.	Croup.	Diarrhœa.	Diphtheria.	Dysentery.	Fevers, Typhoid, &c.	Heart, Diseases of.	Hooping Cough.	Kidneys, Disease of.	Liver, Disease of.	Old Age.	Pneumonia and Congestion of Lungs.	Scarlatina.	Stomach, Diseases of.
AGES.	Under 5 years	29	3	93	77	....	279	33	72	60	53	19	22	13	40	1	1	...	121	67	7
	5 and under 10	12	2	12	3	...	..	7	20	....	32	...	13	10	2	1	...	....	9	17	....
	10 " " 15	14	....	6	3	1	....	23	....	....	7	..	12	8	...	...	1	...	10	2	....
	15 " " 20	15	3	4	4	1	....	80	....	....	4	...	16	7	....	5	..	....	8	3	....
	20 " " 30	19	5	4	2	2	....	241	1	1	1	1	25	13	....	10	2	....	23	1	1
	30 " " 40	19	7	5	6	22	...	159	....	2	...	4	26	24	...	20	6	...	29	....	1
	40 " " 50	21	25	9	11	31	...	88	....	....	1	3	11	42	..	22	9	...	50	...	3
	50 " " 60	17	29	16	13	49	....	73	...	2	...	2	11	61	....	29	5	...	49	...	1
	60 " " 70	6	76	17	20	45	....	43	1	8	....	3	12	69	....	26	13	3	76	....	6
	70 " " 80	9	94	18	19	26	...	25	....	9	....	2	6	78	..	36	8	73	59	....	3
	80 and over	10	44	5	10	14	....	8	....	1	...	2	4	24	...	9	1	190	29	1	2
	Not stated	2	1	....	...	2	....	1	....	1	1	....	...	....	...	...	1	1	2	....	....
LOCALITY.	Bristol County	5	16	2	5	8	5	12	4	4	5	3	6	13	..	8	2	9	15	...	1
	Kent County	6	18	11	3	9	23	45	8	2	5	4	14	27	1	10	6	32	20	3	2
	Newport County Towns	3	16	4	2	2	5	11	3	3	6	1	5	7	....	7	....	18	12	2	1
	Newport City	5	12	16	11	6	11	36	3	1	....	1	3	18	4	10	5	29	21	4	1
	Providence County Towns	58	99	53	71	67	133	273	46	43	39	19	69	94	8	31	17	87	151	24	12
	Providence City	83	110	100	76	88	86	348	28	27	37	8	53	159	24	88	16	70	227	38	4
	Washington County	13	18	3	..	13	16	56	2	4	7	.	8	31	4	5	1	22	19	20	3

COMMENTS.

In the preceding pages there have been presented, numerically and in tabular form, the various causes of death in Rhode Island, in 1885. In Tables VIII and IX they were presented at considerable length, in various specific terms, and in Table X more or less grouped in a general nosological arrangement.

In Table VIII the number of deaths from *each cause* and of *each sex* is shown, for *each month* in the year, and the *parentage* of the decedents from *each cause* during the year.

In Table IX the number of decedents of *each sex* from *each cause,* in the *different periods of life*, is given.

In Table X, with the classification and percentage of causes of death, the number of each general cause, in each division of larger population, is given.

Table LVIII is a compend in part of the three tables previously alluded to, and contains the particulars of the causes of death, in 1885, of the principal causes which will be commented upon in the following pages.

DEATHS FROM ACCIDENTS.

The number of deaths from accidental causes of all kinds, reported in Rhode Island, in 1885, was 173. This number is 7 less than during 1884.

Of these 173 deaths 19 were from burns and scalds; 41 by drowning; 25 from falls; 9 from poisoning; 15 from railroad accidents; 9 from asphyxia, and 54 from accidents too numerous to specify.

Of the whole number of deaths by accident 135 were males, and 38 were females; 72 were of American, and 101 were of foreign parentage.

Of the sexes the proportion was 78 per cent. of male decedents, to 22 per cent. of female decedents. Of parentage, 58 per cent. was of foreign, and 42 per cent. of American.

The number of deaths in each division of the year was as follows:

First Quarter	56	Third Quarter	45
Second Quarter	31	Fourth Quarter	41
	—		—
First half	87	Second half	86
Whole Year	173		

In regard to periods of life, the decedents from accidental causes were divided as follows: Under 5 years, 29; 5 and under 10, 12; between 10 and 20, 29; between 20 and 40, 38; between 40 and 60, 38; over 60, 25; and 2, age not stated.

In regard to sectional divisions of the State, 5 of the deaths from accidental causes were in Bristol county; 6 in Kent county; 8 in Newport county; 13 in Washington county, and 141 in Providence county.

The whole number of deaths from accidental causes, in 1885, *in proportion to the whole number of deaths* from specified causes, in the State, was about 32.5 in every one thousand.

APOPLEXY AND PARALYSIS.

There were 289 deaths from apoplexy and paralysis in Rhode Island, in 1885, according to the returns. The number reported is 14 more than in the year 1883, and 9 less than in 1884.

The following Table will present some of the social and local relations of apoplexy and paralysis, as causes of death, during the last twenty-one years:

TABLE LX.

Showing the whole number and percentage of the Deaths in the State, from Apoplexy and Paralysis combined: and also the Sex and Parentage of the Decedents from these causes, and the Number of the same in each of the Counties, from 1865 to 1885, inclusive.

YEARS.	Whole Number of Deaths.	APOPLEXY AND PARALYSIS.											
				SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
		Number from Apoplexy and Paralysis.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865......	3.405	100	2.93	52	48	81	19	9	8	14	23	38	8
1866......	2,970	92	3.09	46	46	80	12	8	5	17	24	29	9
1867......	2.889	124	4.29	59	65	101	23	9	9	13	35	49	9
1868.. ...	2,912	111	3.81	56	55	86	25	9	6	19	27	46	4
1869......	3,382	117	3.46	55	62	92	25	12	13	18	20	48	6
1870......	3.238	130	4.32	68	62	105	25	14	10	10	39	52	5
1871......	3.344	156	4.66	73	83	113	43	10	17	15	40	61	13
1872......	4,247	125	2.97	62	63	96	29	17	9	10	27	52	10
1873......	4,403	134	3.04	59	75	109	25	9	8	17	26	57	17
1874......	4.229	156	3.69	84	72	120	36	14	10	16	42	59	15
1875......	4.317	166	3.61	79	87	133	33	7	13	17	46	75	8
1876......	4,116	165	4.01	79	86	130	35	13	11	13	45	68	1
1877......	4,450	181	4.07	87	94	123	58	10	10	16	52	74	19
1878......	4,441	188	4.23	104	84	145	43	12	16	21	58	66	15
1879......	4,472	220	4.92	114	106	146	74	12	9	29	71	89	10
1880......	4,829	215	4.67	109	106	157	58	18	13	22	71	78	13
1881......	5,016	244	4.86	116	128	170	74	17	15	25	70	101	16
1882......	5,074	265	5.22	139	126	168	97	15	29	25	65	117	15
1883......	5,282	275	5.22	138	137	192	83	11	28	22	75	118	21
1884......	5,141	298	5.80	135	163	176	122	21	14	28	108	105	22
1885......	5,389	289	5.38	144	189	183	106	16	18	28	99	110	18
Total.....	87,546	3,751	4.16	1,840	1,937	2,706	1,045	263	271	394	1,063	1,492	268

Table LX shows a large proportional as well as actual increase of deaths from apoplexy and paralysis, during twenty-one years.

TABLE LXI.

Showing the ages of Decedents from Apoplexy and Paralysis, in each of the last twenty-one years.

APOPLEXY AND PARALYSIS.	PERIODS OF LIFE.								
	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	......	3	5	6	19	20	28	19	......
1866	1	1	7	16	9	24	27	7	......
1867	2	......	6	6	15	38	40	17	......
1868	2	3	3	11	16	27	31	16	2
1869	1	1	5	12	20	28	34	15	1
1870	4	1	10	9	12	23	41	20	......
1871	3	4	7	14	21	46	45	15	1
1872	1	4	5	17	20	26	41	11	......
1873	2	3	4	14	22	35	37	16	1
1874	1	2	9	9	30	39	40	25	1
1875	6	2	8	19	23	40	45	22	1
1876	4	4	4	13	25	43	49	23	......
1877	1	2	9	12	24	50	61	22	......
1878	4	2	7	14	41	40	53	26	1
1879	4	6	11	18	27	57	59	38	......
1880	1	2	8	18	21	59	70	34	2
1881	1	7	11	20	36	55	70	42	2
1882	4	5	14	28	41	57	77	38	1
1883	8	4	11	19	45	56	83	49	......
1884	10	7	16	21	32	68	95	45	4
1885	8	5	7	25	29	76	94	44	1
Total	68	68	167	321	528	917	1,109	544	18

DISEASES OF THE BRAIN.

Under the head of "Diseases of the Brain," in Table LIX, there are included all those diseases returned as "Cerebral Meningitis," "Cerebritis," "Congestion," "Encephalitis," "Inflammation," and "Diseases of the Brain."

The whole number, 189, is 41 more than in the previous year.

The proportions of deaths from these causes to whole number of deaths from all causes, during each of the last ten years, are as follows:

Years.	Per cent.	Years.	Per cent.
1876	3.75	1881	3.57
1877	3.68	1882	3.60
1878	3.28	1883	3.40
1879	3.72	1884	2.90
1880	3.49	1885	3.53

Of the 189 decedents 98 were males, and 91 were females. In regard to parentage, 94 were of American, and 95 of foreign parentage.

The deaths in the different seasons of the year were as follows:

First Quarter	51	Third Quarter	47
Second Quarter	44	Fourth Quarter	47
	—		—
First half	95	Last half	94
Whole number	189		

The largest number of deaths from diseases of the brain have usually occurred in the third quarter of the year. 1885 is an exception, the largest number occurring in the first quarter.

Brain diseases occur largely in children. Of the 189 decedents from those causes, in 1885, 93 were under five years of age, and 105 were under ten years of age.

BRONCHITIS.

The number of decedents, in 1885, whose deaths were reported as having been caused by bronchitis, was 168. This is a larger number than was ever before returned in a single year.

Of the 168 decedents 82 were males, and 86 were females; or at the rate of 93 males to each 100 females.

In relation to parentage, 91 were of American, and 77 of foreign parentage.

TABLE LXII.

Showing the whole number of Decedents in the State from Bronchitis, with the Percentage of whole number of deaths, the Sex, Parentage, and Localities of Occurrence, during each of the twenty-one years from 1865 to 1885, inclusive.

YEARS.	Whole Number of Deaths.	BRONCHITIS.											
				SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
		Number of Deaths from Bronchitis.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865......	3,405	9	.27	4	5	6	3	1	......	3	......	5	......
1866......	2,970	14	.51	3	11	10	4	....	1	2	7	4	......
1867.....	2,889	19	.71	8	11	10	9	1	2	1	5	10	......
1868......	2,912	20	.76	9	11	7	13	......	1	2	5	10	2
1869......	3,382	20	.65	8	12	9	11	......	......	1	4	15	......
1870......	3,238	26	.84	15	11	11	15	......	......	8	8	17	......
1871......	3,344	24	.78	10	14	11	13	......	1	1	5	17	......
1872......	4,247	25	.65	10	15	11	14	1	1	1	6	16	......
1873......	4,403	27	.64	12	15	11	16	......	......	1	7	18	1
1874......	4,229	39	.96	22	17	12	27	......	......	......	6	32	1
1875......	4,317	57	1.39	32	25	29	28	......	......	1	21	33	2
1876......	4,116	57	1.46	23	34	26	31	......	2	......	7	46	2
1877......	4,450	69	1.62	32	37	35	34	1	1	1	22	44	......
1878......	4,441	80	1.89	30	50	37	43	1	2	6	22	48	1
1879......	4,472	62	1.47	31	31	31	31	1	1	5	21	34	.....
1880......	4,829	91	1.98	49	42	44	47	1	6	6	21	56	1
1881......	5,016	84	1.80	48	36	39	45	1	1	2	25	53	2
1882......	5,074	100	2.08	39	61	47	53	3	2	6	25	60	4
1883......	5,282	111	2.10	56	55	51	60	5	2	3	42	57	2
1884......	5,141	118	2.29	58	60	40	70	7	......	8	42	62	......
1885......	5,389	168	3.09	82	86	91	77	5	3	13	71	76	......
Total, 21 years...	87,546	1,220	1.30	581	639	568	644	28	26	64	372	713	18

During the first four months of the year the decedents from bronchitis numbered 75, during the last four months the number was 41.

There were 77 of the decedents under five years of age, 18 between five and forty years, 24 between forty and sixty, and 49 of the age of sixty and over.

CANCER.

There were 193 decedents in 1885 whose deaths were caused by cancer, according to the returns. The term cancer includes all the various kinds, and in whatever place located.

The varieties of cancer, as reported, may be found in Tables VIII and IX, on pages 17 and 24. They are classed in Table X as follows: Cancer in various localities, or cancer (various), 110; cancer of the breast, 24; of the stomach, 35; of the uterus, 24.

In 1885 the deaths from cancer, in the several seasons of the year, were as follows:

First Quarter	45	Third Quarter	62
Second Quarter	40	Fourth Quarter	46
	—		—
First half	85	Last half	108
Whole number	193		

The percentage of deaths from cancer, in proportion to whole number of deaths, in each year for ten years, 1876 to 1885, inclusive, is shown as follows:

Years.	Percentage.	Years.	Percentage.
1876	2.72	1881	2.90
1877	3.17	1882	2.75
1878	2.82	1883	3.20
1879	2.96	1884	3.05
1880	2.72	1885	3.59

Sex.—Of the 193 decedents from cancer 52 were males, and 141 were females; or 26.9 males and 73.1 females in every one hundred.

Parentage.—There were 114 of American parentage, and 79 of foreign.

CHILD-BIRTH.

Under the head of "Child-birth" are included puerperal fever, puerperal convulsions, and whatever causes that can only occur as the result of child-birth.

The number reported in 1885 was 47; 22 of which were from the immediate effects of child-birth, including metritis, hemorrhage, &c., 7 from puerperal convulsions, and 18 from puerperal fever.

Of the whole number 21 were of American, and 26 of foreign parentage.

CHOLERA INFANTUM.

The number of deaths from cholera infantum, according to the returns for 1885, was 279. The number is 46 less than in 1884.

Sex.—Of the 279 decedents 150 were males and 129 were females; or 116 males to every 100 females.

Of parentage, 128 were of American, and 151 of foreign parentage; or 118 of foreign to every 100 of American parentage.

In proportion to the population, by the census of 1885, the deaths occurred in the different divisions of the State as follows:

Bristol County	One in every 2.267 persons.
Kent County	One in every 940 persons.
Newport County	One in every 1,766 persons.
Providence County Towns	One in every 771 persons.
Providence City	One in every 1,361 persons.
Washington County	One in every 1,400 persons.
Entire State	One in every 1,090 persons.

The following Table shows the whole number of reported deaths from cholera infantum; the sex and parentage of the decedents; and the number in each of the larger divisions of the State, in each of the last twenty-one years:

TABLE LXIII.

YEARS.	CHOLERA INFANTUM.										
	Number of Deaths.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
		Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865	145	63	82	61	84	17	7	14	48	50	9
1866	110	67	43	50	60	1	7	8	39	47	8
1867	117	64	53	62	55	4	3	7	45	49	9
1868	154	85	69	66	88	13	4	12	44	70	11
1869	151	81	70	79	72	6	15	6	48	65	11
1870	213	106	107	95	118	15	15	13	69	93	8
1871	172	85	87	82	90	14	12	12	59	62	13
1872	391	195	196	167	224	16	16	21	157	151	30
1873	285	148	137	165	120	17	14	16	120	99	19
1874	265	140	125	115	150	4	12	5	84	134	26
1875	318	156	162	155	163	20	16	20	108	136	18
1876	250	131	119	105	145	5	12	29	68	124	12
1877	259	139	120	96	163	12	12	9	96	122	7
1878	168	96	72	73	95	7	14	7	64	71	5
1879	161	88	73	71	90	8	16	21	51	50	6
1880	247	123	124	109	138	13	11	10	93	100	20
1881	240	130	110	102	138	10	22	14	75	102	17
1882	325	173	152	133	192	20	11	19	132	130	13
1883	242	124	118	104	138	12	7	22	88	108	5
1884	325	177	148	139	186	10	12	26	114	144	19
1885	279	150	129	128	151	5	23	16	133	86	16
Total	4,817	2,521	2,296	2,157	2,660	229	262	307	1,735	2,002	282

The number of decedents from cholera infantum, during the twenty-one years from 1865 to 1885, inclusive, was 4,817.

The proportion to total mortality, for the period of twenty-one years, was 5.5 per cent. For 1885 the proportion was 5.16 per cent.

There were 116 males to every 100 females among the decedents during the twenty-one years; and 123.3 decedents of foreign parentage to every 100 of American, during the same period.

CONSUMPTION.

The decedents from consumption, during 1885, numbered 781. In 1883 the number was 766, and in 1884 it was 739.

Sex—Of these 781 decedents 382 were males, and 399 were females; giving 104.5 female decedents to every 100 male decedents; or 48.9 males and 51.1 females in every 100 decedents from consumption.

The nearly equal number of the sexes whose deaths were caused by consumption, in 1885, is a very rare occurrence, if not unprecedented. Usually there are one hundred and twenty or more females to every one hundred male decedents from consumption.

Parentage.—There were 315 decedents of American parentage, and 466 of foreign; a proportion of 148 of foreign parentage to every 100 of American. In 1884 there were 160 of foreign parentage to every 100 of American.

Season.—For an unusual circumstance, the largest number of deaths in any one month, 76, occurred in July; the next largest, 75, in September; the smallest number, 52, in October.

The number in each quarter of the year was as follows:

First Quarter	191	Third Quarter	204
Second Quarter	214	Fourth Quarter	172
First half	405	Second half	376
Total			781

Ages.—During 1885, of the 781 decedents from consumption, 241, or nearly one-third, were between the ages of 20 and 30, and 159, or more than one-fifth, were between the ages of 30 and 40.

In order to show more concisely the relation of age to mortality from Consumption, during 1885, the following synopsis is presented:

Under 10 years of age	40
Between 10 and 20 years	103
Between 20 and 30 years	241
Between 30 and 40 years	159
Between 40 and 50 years	88
Between 50 and 70 years	116
Over 70 years	34
Total	781

There is a considerable difference in the proportion of deaths from known causes, in different years in the same locality, as well as in different localities in the same year.

The following Table shows the total deaths from all reported *known causes*, with the number and percentage of deaths from consumption to the same, in each of the larger divisions of the State, and in the whole State, in each of the last seventeen years, and in the aggregate for a period of twenty-five years, from 1860 to 1884, inclusive:

TABLE LXIV.—CONSUMPTION.—*Locality, Number and Percentage.*

COUNTIES.	1869.	1870.	1871.	1872.	1873.	1874	1875.	1876	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	Total, 25 years, 1860-1884.
BRISTOL COUNTY.																		
Total deaths, stated causes	165	146	150	184	173	159	162	148	201	187	141	209	203	183	197	199	185	4,135
Consumption	26	26	16	23	16	18	21	19	27	23	16	19	25	36	19	21	12	543
Percentage	15.76	17.81	10.67	12.50	8.24	11.32	12.97	12.83	13.43	12.30	11.35	9.09	12.31	19.67	9.64	10.50	6.48	13.13
KENT COUNTY.																		
Total deaths, stated causes	265	238	281	248	241	252	263	209	251	249	277	293	313	288	283	268	355	6,206
Consumption	50	46	63	33	42	32	43	28	42	41	38	45	36	51	39	37	45	1,078
Percentage..............	18.86	19.33	22.42	13.30	17.43	12.69	16.35	13.39	16.73	16.47	13.72	15.35	11.20	17.71	13.78	13.46	12.70	17.37
NEWPORT COUNTY.																		
Total deaths, stated causes	259	271	214	262	366	221	277	280	243	265	330	324	346	378	401	403	408	7,869
Consumption	40	37	23	29	44	26	41	45	33	31	45	34	51	46	55	43	47	1,086
Percentage	15.44	13.66	10.75	11.06	12.02	11.77	14.80	16.07	13.58	11.69	13.64	10.40	14.74	12.17	13.72	10.67	11.52	13.80
PROVIDENCE CO. TOWNS.																		
Total deaths, stated causes	912	964	989	1,331	1,389	1,217	1,230	1,110	1,301	1,308	1,233	1,437	1,451	1,509	1,656	1,723	1,918	28,161
Consumption	180	172	195	321	197	136	201	211	222	229	197	189	220	224	257	248	273	4,799
Percentage	19.74	17.84	19.72	16.73	14.18	11.42	16.34	19.01	15.96	17.51	15.98	15.35	15.16	14.82	15.52	14.13	14.20	17.04

Table LXIV.—CONSUMPTION.—*Number, Locality and Percentage.*—Continued.

COUNTIES.	1869	1870.	1871.	1872.	1873.	1874	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883	1884.	1885.	Total, 25 years, 1860-1884.
Providence City.																		
Total deaths, stated causes	1,240	1,249	1,239	1,581	1,725	1,965	1,894	1,850	1,932	1,973	2,017	2,063	2,130	2,230	2,351	2,227	2,157	39,195
Consumption	210	238	185	242	230	270	297	284	294	305	293	322	344	351	364	344	348	6,374
Percentage	16.95	19.06	16.74	15.31	13.33	13.74	15.68	15.35	15.22	15.46	14.53	15.60	16.15	15.73	15.48	15.43	16.10	16.26
Washington County.																		
Total deaths, stated causes	241	233	222	265	292	263	284	306	240	249	220	270	226	215	208	279	307	5,711
Consumption	53	56	35	49	51	44	47	68	43	47	48	33	30	29	32	46	56	1,031
Percentage	17.84	24.04	15.76	18.49	17.47	16.73	16.55	22.22	17.91	18.88	21.82	12.22	13.27	13.49	15.40	16.28	17.93	18.05
Whole State.																		
Total deaths, stated causes	3,082	3,101	3,095	3,871	4,186	4,077	4,110	3,903	4,258	4,231	4,218	4,596	4,669	4,803	5,096	5,099	5,330	91,477
Consumption	549	475	527	597	580	529	650	655	661	676	637	642	706	737	766	739	781	14,911
Percentage	17.81	18.52	17.03	15.41	13.86	12.96	15.79	16.78	15.52	15.98	15.10	14.02	15.12	15.33	15.03	14.34	14.42	16.30

In the different counties, and localities of larger population, the decedents from consumption vary considerably one year with another, in proportion to the whole number of decedents from all other specified causes. The larger the population, however, the smaller the difference from year to year.

In the whole State, during the last seven years, the proportion of decedents from consumption, to whole number of deaths from stated causes, has averaged 14.77 per cent. The proportion has not varied one and one-half per cent. in the ratio, during any one of those seven years.

In the counties it has been different. Bristol county shows a variation, during the seven years, of 19.67 per cent., in 1882, and 6.48 per cent. in 1885. The average ratio of twenty-five years is 13.13 per cent.

Kent county has not had so variable a yearly proportion as Bristol county, but has had a considerably larger average proportion. The average ratio of twenty-five years standing at 17.37 per cent.

Newport county has not varied so largely as Bristol from year to year, although having a slightly larger ratio during twenty-five years, i. e. 13.80 per cent.

In Providence county towns, including the city of Pawtucket, the different yearly ratios have not varied more than the State at large, although the average percentage of mortality from consumption, for twenty-five years, exceeds that of the whole State by about three-fourths of one per cent.

Providence city shows a mortality from consumption, during a quarter of a century, less in proportion to stated causes of deaths than the towns of Providence county, including Pawtucket.

Washington county has, with few exceptions, shown the largest proportional mortality from consumption of any locality in the State. For a period of twenty-five years the average ratio has been 18.05 per cent.

To recapitulate, the ratios of the different localities, for twenty-five years, are as follows:

Bristol County	13.13	Providence County Towns	17.04
Kent County	17.37	Providence City	16.26
Newport County	13.80	Washington County	18.05

Whole State....................16.30 per cent.

CONSUMPTION. PROPORTION OF DEATHS TO POPULATION.

1885.

	Persons, one death to every		In every 1,000 of population.
Bristol County	945	or	1.06
Kent County	480	or	2.09
Newport County	602	or	1.66
Providence County Towns	375	or	2.66
Providence City	339	or	2.95
Washington County	401	or	2.49
Entire State	389	or	2.57

CONSUMPTION IN RHODE ISLAND.

STATISTICS OF TWENTY-FIVE YEARS, WITH COMMENTS.

The remaining pages devoted to the consideration of pulmonary consumption, as a cause of death, are extracts from a paper prepared upon request by the State Registrar, and read before the American Public Health Association, at the meeting held in Washington, D. C., December 7-11, 1885, and published in the transactions of that Association, and in the Eighth Annual Report of the State Board of Health of Rhode Island.

TABLE LXV.

Giving the Number of Deaths from Pulmonary Consumption in Rhode Island, by months, sex and parentage, in aggregates of five years each, from 1860 to 1884, inclusive; also, various summaries.

PULMONARY CONSUMPTION.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
YEARS.																													
1860 to 1864, inclusive.	103	95	94	108	97	122	102	124	78	104	92	101	86	95	99	125	86	145	93	130	107	110	122	126	......	......	1,159	1,385	2,544
1865 to 1869, " .	99	113	90	108	114	130	107	123	94	103	110	97	90	121	110	133	108	132	107	134	110	125	105	127	1,575	1,115	1,244	1,446	2,690
1870 to 1874, " .	128	116	92	139	106	129	103	127	117	142	79	134	89	134	98	130	103	134	93	132	92	133	117	141	1,507	1,301	1,217	1,591	2,808
1875 to 1879, " .	127	170	104	136	145	166	121	146	131	176	119	145	114	137	123	163	110	140	102	151	125	145	115	163	1,499	1,780	1,436	1,843	3,279
1880 to 1884, " .	131	163	134	140	154	160	153	196	145	183	115	164	124	152	123	208	117	157	142	154	128	154	131	162	1,399	2,191	1,597	1,993	3,590
Total sexes by months	588	657	514	631	616	707	586	716	565	708	515	641	503	639	553	764	524	708	537	701	562	667	590	719	......	......	6,653	8,258	14,911
Totals each month...	1,245		1,145		1,323		1,302		1,273		1,156		1,142		1,317		1,232		1,238		1,229		1,309		......	......	......	......	14,911
Totals parentage *20 years..............	....						....						....						....						5,980	6,387			
Totals of quarterly periods.............	1st quarterly period, ...3,713..........						2d quarterly period, ...3,731..........						3d quarterly period, ...3,691..........						4th quarterly period, ...3,776..........						......	......	......	......	14,911
Totals of each 6 mos..	1st half of the year, ...7,444......................												2d half of the year. ....7,467......................												......	......	......	......	14,911

* Parentage not reported previous to 1865.

TABLE LXVI.

Showing the mortality from Pulmonary Consumption in Rhode Island, at different ages, and of each sex, in periods of five years each, from 1860 to 1884, inclusive, with percentages of the same at different periods of life.

PULMONARY CONSUMPTION.	Under 2.		1 and under 2.		2 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
YEARS.																																	
1860 to 1864, incl.	....	....	....	....	*88	*80	10	17	16	28	101	136	270	377	223	295	175	180	127	100	88	105	44	52	14	11	3	4	1,159	1,385	2,544
1865 to 1869, " .	33	44	20	18	16	20	14	14	12	26	81	163	356	406	234	252	174	184	131	125	106	122	53	53	10	14	4	5	1,244	1,446	2,690
1870 to 1874, " .	23	29	19	20	13	13	6	8	11	30	93	167	312	492	245	297	168	207	145	134	110	108	58	69	10	13	4	4	1,217	1,591	2,808
1875 to 1879, " .	34	31	12	19	15	9	13	18	15	46	106	242	428	563	278	347	198	214	144	151	117	119	62	69	10	14	4	1	1,436	1,843	3,279
1880 to 1884, " .	35	40	22	18	14	13	9	13	18	45	111	215	528	658	306	422	221	223	146	147	118	105	49	64	14	22	6	8	1,597	1,993	3,590
Totals of each sex by ages........	125	144	73	75	146	135	52	70	72	175	492	923	1,894	2,496	1,286	1,613	936	1,008	693	657	539	559	266	307	58	74	21	22	6,653	8,258	14,911
Totals of sexes by ages...........	269		148		281		122		247		1,415		4,390		2,899		1,944		1,350		1,098		573		132		43		......	......	14,911
Total under five years..........	....		698		....		....		....		....		....		....		....		....		....		....		....		....		......	......	......
Per cent., different ages.......	1 80		0.99		1.88		0.82		1.66		9.49		29.44		19.44		13.05		9.06		7.36		3.84		.89		.28		......	......	100.00
Per cent., under five years......	....		4.67		....		....		....		....		....		....		....		....		....		....		....		....		......	......	......
Per cent. 5 to 20.	....		....		....		....		11 97		....		....		....		....		....		....		....		....		....		......	......	......
Per cent. 20 to 40.	....		....		....		....		....		....		48.		88		....		....		....		....		....		....		......	......	......
Per cent. 40 to 60.	....		....		....		....		....		....		....		....		22.		11		....		....		....		....		......	......	......
Per cent. 60 to 80.	....		....		....		....		....		....		....		....		....		....		11.		20		....		....		......	......	......

* Including all under five years of age. Ages under five not specified in tabular reports previous to 1865.

Sex.—Of the deaths from consumption, during the period of twenty-five years, there was a proportion of 124 female decedents to every 100 male decedents.

The ratio of the sexes by population is about 106 females to every 100 males.

An excess of female decedents from consumption is the rule during every month of every year, with scarcely any exceptions.

Season.—The months in which the mortality from consumption occurred, during the period of twenty-five years, in the order of from the largest to the smallest, are as follows: March, 1,323; August, 1,317; December, 1,309; April, 1,302; May, 1,273; January, 1,245; October, 1,238; September, 1,232; November, 1,229; June, 1,156; February, 1,145; July, 1,142. Pulmonary consumption as a disease is more evenly distributed through all months of the year than any other, and deaths therefrom maintain a corresponding uniformity.

The different quarters of the year, in the aggregates of twenty-five years, shows a mortality in numbers as follows: 1st quarter, 3,713; 2nd quarter, 3,731; 3rd quarter, 3,691; 4th quarter, 3,776.

Age.—While no period of life is exempt from the ravages of consumption, there is a very strongly marked difference in the mortality at different ages. During the twenty-five years comprised in the tables on previous pages, the average proportions in every 1000 deaths from consumption were as follows:

	In every 1,000.		In every 1,000.
Under 1 year of age	18.0	30 to 40 years of age	194.4
1 and under 2 years of age	9.9	40 to 50 " "	130.5
2 and under 5 " "	18.8	50 to 60 " "	90.6
5 to 10 " "	8.2	60 to 70 " "	73.6
10 to 15 " "	16.6	70 to 80 " "	38.4
15 to 20 " "	94.9	80 to 90 " "	8.9
20 to 30 " "	294.4	Age not stated	2.8

Longer periods of life may be taken as follows:

	In every 1,000.		In every 1,000.
Under 20 years of age	166.4	60 to 80 years of age	112.0
20 to 40 " "	488.8	80 to 90 " "	8.9
40 to 60 " "	221.1	Not stated	2.8

It will be seen that nearly one-half of the mortality from consumption occurs in the period of life between 20 and 40 years of age.

RATIO TO POPULATION OF SAME AGE.

	Per cent. of deaths from Consumption.	Per cent. of Population.
Under 5 years	4.67	10.74
5 to 20 "	11.97	29.07
20 to 40 "	48.88	31.55
40 to 60 "	22.11	18.30
60 to 80 "	11.20	6.71
80 to 90 "	.89	.57

Under 20 years of age the proportion of deaths from consumption, to whole number of deaths from consumption, is less than the proportion of that class of population by age, to the whole population, by about 60 per cent. Above 20 years of age the tide turns. From 20 to 40 years of age the proportion of decedents from consumption is larger than the proportion of that class, to the whole population, by about 40 per cent. From 40 to 60 years it is larger by about 20 per cent., and above 60 years by nearly 70 per cent.

It does not seem by the results of registration, and by the comparison of the same with the population of the same age, that advanced life acquires any immunity from the development of pulmonary consumption, but that the lessened number of decedents is due to the diminished number of living individuals of that advanced age. And, more than that, statistics seem to show, on the other hand, that beyond the sixtieth year of life there is an increased disposition to the development of pulmonary diseases.

PROPORTION OF DEATHS FROM CONSUMPTION TO TOTAL DEATHS FROM ALL SPECIFIED CAUSES.

	Five years, 1860—1864.	Five years, 1865—1869.	Five years, 1870—1874.	Five years, 1875—1879.	Five years, 1880—1884.
Percentage	18.70	18.74	15.56	15.83	14.80
Per 1,000	187.0	187.4	155.6	158.3	148.0

The preceding summary will show the average annual percentage of deaths from consumption, in proportion to all other stated causes, in each period of five years from 1860 to 1884, inclusive.

The percentage is based upon the returns of deaths giving the cause of death. The number of deaths returned with cause unknown varies from year to year considerably, but with a gradually dininishing proportion. During the year 1884 the number was 42. It was the smallest ever returned in any single year. Some slight allowance may be made, therefore, in the percentages of the two or three earlier periods of five years.

CONSUMPTION. PROPORTION OF DEATHS TO POPULATION.

In ascertaining the proportion of deaths from consumption to the living population, in each of the five-year periods, the basis of computation is obtained by adding to the population taken by the State or National censuses, at the beginning of each five-year period, one-half of the increase of population during that period, ascertained by the census taken at the beginning of the succeeding five-year period. An average is thereby found which, if not absolutely and mathematically exact, is very close and sufficiently approximate thereto.

DECEDENTS FROM CONSUMPTION, 1860 TO 1884, INCLUSIVE.

	Five years, 1860–1864, incl. Of population.	Five years, 1865–1869, incl. Of population.	Five years, 1870–1874, incl. Of population.	Five years, 1875–1879, incl. Of population.	Five years, 1880–1884, incl. Of population.
Annual average, one in every	353	374	423	424	404
" " in every 10,000,	28.3	26.7	23.6	23.5	24.7
Aggregate in every 10,000	141.5	133.5	118.0	117.5	123.5

The results of investigation show that consumption, as a cause of death, has diminished in frequency since 1860, commencing with an average proportion of 28.3 annually in every 10,000 of the population during the five years from 1860 to 1865, and closing with an average annual proportion of 24.7 during the five-year period ending December 31, 1884. It will be seen, however, that the diminution has not been by regular gradation, the third and fourth five-year periods showing an annual average proportion to population somewhat smaller than the last period.

CONSUMPTION. PROPORTION OF DEATHS TO POPULATION BY PARENTAGE.

In the previous consideration of the proportion of deaths from consumption to population regard was had to the *total* population, comprising all of the two distinctive classes, that is, American and foreign. It is now proposed to consider the proportions of the two classes (American and foreign) separately, that is, the number of deaths from consumption in each class, in periods of five years each, as before.

There can be, however, but four periods of five years each in such consideration, as the tabulated reports of the parentage of decedents were not made previous to 1865.

Decedents of mixed parentage, i. e., of American father and foreign mother, and vice versa, are classed with the parentage of the fathers.

It is necessary in this connection to make use of the census enumerations taken during the first year of each five-year period, as the enumerations of the census of 1885, in relation to the population by parentage, have not at the time of this writing been completed.

The circumstance, however, is consequential only so far as the increase of population in the one class may have been greater than in the other. Whatever difference there may have been would doubtless be in favor of the class of foreign parentage. That the reader may form some estimate of what such small difference might be (the proportions being each for its own class) the populations of the two classes at the commencement of each five-year period are given:

	1865.	1870.	1875.	1880.
American parentage	117,316	124,591	134,722	139,117
Foreign parentage	67,649	92,762	123,517	137,414

The whole number of decedents from consumption in each class, during each period of five years, was as follows:

	1865—1869.	1870—1874.	1875—1879.	1880—1884.
	No. deaths from Consumption.	No. deaths from Consumption.	No. deaths from Consumption.	No. deaths from Consumption.
American parentage	1,157	1,507	1,499	1,399
Foreign parentage	1,114	1,301	1,780	2,191

The following summary will show the *proportional* mortality from consumption in each class, in each period of five years:

	Five years, 1865—1869.	Five years, 1870—1874.	Five years, 1875—1879.	Five years, 1880—1884.
	Deaths from Consumption.			
	Annual average. One in every	Annual average. One in every	Annual average. One in every	Annual average. One in every
American parentage	372	413	449	497
Foreign parentage	303	356	347	313

The reader will scarcely fail to observe the regularity with which the proportions of deaths from consumption, in the population of American parentage, have diminished during the twenty years. At the same time it will be seen that the mortality from the same disease, in the population of foreign parentage, holds nearly the same proportion to the population of that class in the last five years as in the first.

Another method of presenting the varying proportions of mortality from consumption during twenty years, in the two classes of population, may have some advantages, in that the results may be more immediately obvious, as follows:

AVERAGE ANNUAL NUMBER OF DEATHS IN EACH PERIOD.

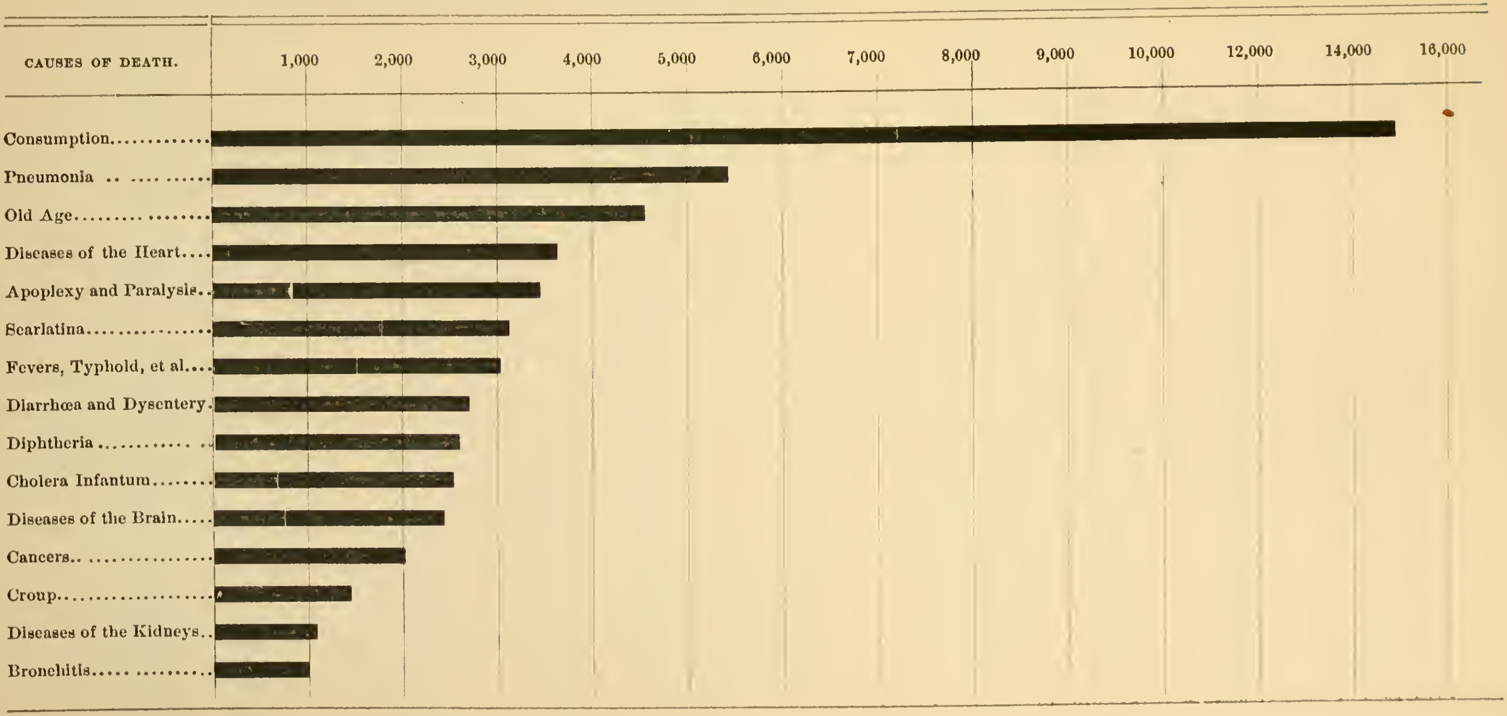
Of population.	Five years, 1865—1869. In every 10,000.	Five years, 1870—1874. In every 10.000.	Five years, 1875—1879. In every 10.000.	Five years, 1880—1884. In every 10,000.
American parentage	26.8	24.2	22.3	20.0
Foreign parentage	33.0	28.1	26.0	31.9

Again will be seen the diminution, by regular gradation, of the percentage of decedents from consumption, in the population of American parentage, and the approximate maintainance, in the last five-year period, of the average proportion of the first five-year period in the population of foreign parentage. The more favorable occurrence of diminished proportion, during the second and third periods, is shown to have taken a more unfavorable turn in the fourth.

It should be understood that the term "foreign parentage" is meant to include not only all persons of foreign birth, but also all persons born in the United States whose parents were foreign born. And therein is the limit of foreign parentage, as the term is used in this paper.

All persons who were born in the United States of parents whose birth also occurred in the United States are reckoned as of American parentage, although their grandparents may have been foreign born, and their parents reckoned as of foreign parentage.

Diagram III. Exhibiting the comparative mortality by absolute number of decedents from fifteen most important causes of death, in Rhode Island, during twenty-five years from 1860 to 1884 inclusive.



CROUP.

There were 94 decedents from croup, in Rhode Island, in 1885. There were 80 in 1884, 71 in 1883, 77 in 1882, and 101 in 1881. As a cause of death croup has diminished in comparative importance during the last twenty years.

Sex.—Of the 94 decedents from croup, in 1885, there were 45 males and 49 females, a proportion of 92 males to each 100 females, which is not in accordance with the rule of twenty-five years, in which there has been a predominance of males.

Parentage.—There were 42 decedents of American parentage, and 54 of foreign parentage. The proportions were in the ratio of 129 of foreign to each 100 of American parentage.

Age.—There were 13 of the decedents under one year of age, 20 of one year and under two, 39 of two years and under five, and 20 between five and ten, and 2 above twenty years of age.

Of the 94 deaths from croup 74 occurred in Providence county.

DIARRHŒA AND DYSENTERY.

There were 120 decedents from diarrhœa and dysentery, in 1885.

Sex.—Of the 120, 61 were males, and 59 were females, or in the ratio of about 103 males to each 100 females.

Parentage.—There were, of the 120 decedents, 51 of American parentage, and 69 of foreign parentage, or a proportion of about 135 of foreign parentage to every 100 of American.

Age.—There were 79 of the decedents from diarrhœa and dysentery under 5 years of age, and there were 14 over 70 years of age, leaving 26 only for all the years between 5 and 70. One, age not stated.

Locality.—Of the 120 decedents 97 were in Providence county.

Season.—There were 81 of the deaths from diarrhœa and dysentery that occurred during the months of July, August and September.

DIPHTHERIA.

The number of deaths from diphtheria, in 1885, was 99.

Sex.—Of the 99 decedents 47 were males, and 52 were females, or a proportion of 90 males to each 100 females.

Parentage.—There were 48 of American, and 51 of foreign parentage, a proportion of about 48 of American and 52 of foreign in each 100 decedents.

Season.—There were 27 deaths from diphtheria in the first quarter, 15 in the second quarter, 26 in the third quarter, and 41 in the fourth quarter.

Age.—There were 53 under five years of age, and 32 between five and ten.

Locality.—Of the 99 decedents 76 were in Providence county, 5 in Kent county, 7 in Washington county, 6 in Newport county, and 5 in Bristol county.

CROUP AND DIPHTHERIA.

For the purpose of comparison of the two diseases, from year to year, the following Table will show the number of deaths and the sex of the decedents in Rhode Island, from croup and from diphtheria, in the aggregate of the seven years from 1858 to 1864, inclusive, and also the number, the sex and the *parentage* of the decedents from croup and from diphtheria, in each of the last twenty-one years, from 1865 to 1885, inclusive:

Table LXVII.

YEARS.	CROUP.					DIPHTHERIA.				
	Number of Deaths.	SEX.		PARENTAGE.		Number of Deaths.	SEX.		PARENTAGE.	
		Males.	Females.	American.*	Foreign.*		Males.	Females.	American.	Foreign.
7 years, 1858-1864	517	264	253	......	......	629	272	357	......	......
1865	94	44	50	32	62	82	41	41	62	20
1866	53	26	27	22	31	64	26	38	36	28
1867	50	25	25	21	29	31	14	17	19	12
1868	30	13	17	14	16	20	8	12	11	9
1869	41	19	22	14	27	33	18	15	19	14
1870	53	29	24	25	28	33	17	16	18	15
1871	72	39	33	31	41	57	23	34	29	28
1872	66	37	29	17	49	48	24	24	35	13
1873	68	30	38	35	33	45	24	21	35	10
1874	65	39	26	38	27	59	30	29	37	22
1875	96	53	43	43	53	33	17	16	18	15
1876	102	50	52	42	60	159	77	82	69	90
1877	95	48	47	34	61	492	239	253	233	259
1878	93	45	48	43	50	435	224	211	201	234
1879	96	58	38	40	56	259	121	138	143	116
1880	66	32	34	27	39	152	73	79	75	77
1881	101	45	56	38	63	216	106	110	118	98
1882	77	41	36	32	45	101	48	53	55	46
1883	71	32	39	33	38	95	39	56	45	50
1884	80	40	40	32	48	119	65	54	47	72
1885	94	45	49	42	52	99	47	52	48	51
Total, 28 years	2,080	1,054	1,026	655	908	3,261	1,553	1,708	1,353	1,279

During the twenty-eight years the whole number of deaths from croup was 2,080, and the number from diphtheria was 3,261.

For every 100 deaths from croup there were 157 deaths from diphtheria.

CROUP. SEX AND PARENTAGE.

The proportions of the sexes of the decedents from croup, in the aggregate of twenty-eight years, were as follows: To every 100 female decedents there were 103 male decedents; or 52 males and 48 females in every 100 decedents.

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* Parentage not reported previous to 1865.

During the twenty-one years from 1865 to 1885, inclusive, the decedents from croup, of American parentage, numbered 655, and of foreign parentage 908. To every 100 decedents of American parentage there were 138.6 of foreign parentage; or 41.6 of American and 58.4 foreign in every 100 decedents.

DIPHTHERIA. SEX AND PARENTAGE.

Of the 3,261 decedents from diphtheria, in the aggregate of twenty-eight years, there were 1,553 males and 1,708 females; a proportion of 110 females to every 100 males; or 52.4 females and 47.6 males in every 100 decedents.

Of the parentage of the decedents from diphtheria, during the last twenty-one years, 1,353 were of American, and 1,279 of foreign parentage. There were 105 of American to every 100 of foreign; or 51.4 of American and 48.6 of foreign parentage in every 100 decedents.

SEASON AND MORTALITY.

The following Table will show the influence of season, in regard to mortality from croup and scarlatina for thirty years, and diphtheria for twenty-five years; and in which these diseases may be compared. The Table will give the average quarterly percentages of deaths from each disease:

TABLE LXVIII.

MONTHS.	CROUP. 1853–1882.		DIPHTHERIA. 1858–1882.		SCARLATINA. 1853–1882.	
	Number of deaths.	Per cent.	Number of deaths.	Per cent.	Number of deaths.	per cent.
First Quarter	682	31.70	717	23.58	1,631	33.46
Second Quarter	356	16.60	558	18.35	1,254	25.72
Third Quarter	265	12.30	629	20.04	745	15.48
Fourth Quarter	848	39.40	1,136	38 03	1,242	25.54
Totals	2,151	100.00	3,040	100.00	4,872	100.00

FEVERS, TYPHOID, &C.

The number of decedents, whose deaths were returned as having been caused by "fever" of some form, was 158. Deaths from puerperal fever are not included.

The term "fever" includes the following types of febrile diseases, as may be seen in Table VIII, on page 18: "fevers," unspecified, 18; "gastric," 1; "bilious," 1; "malarial," 30; "typho-malarial," 4; "typhoid," 104.

The following Table exhibits, for each of the last twenty-one years, the whole number of deaths in the State; the number and the percentage, and the sex and parentage of the decedents from fevers, and the number in each division of the State:

TABLE LXIX.

YEARS.	Whole Number of Deaths.	TYPHOID FEVER, ETC.											
				SEX.		PARENTAGE		DIVISIONS OF THE STATE.					
		Typhoid Fever.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865......	3,405	229	6.4	114	115	149	80	8	17	22	82	79	21
1866......	2,970	150	6.0	73	77	82	68	7	5	32	54	45	7
1867......	2,889	119	4.1	60	59	84	35	9	10	17	47	31	5
1868.. ...	2,912	84	2.9	45	39	57	27	4	5	7	30	23	15
1869......	3,382	101	3.0	53	48	79	22	7	7	1	37	33	16
1870......	3,238	153	4.7	66	87	80	73	5	11	14	57	49	17
1871......	3,344	125	3.7	60	65	69	56	2	8	10	41	51	13
1872......	4,247	179	4.2	87	92	91	88	4	12	6	75	65	17
1873......	4,403	172	3.9	73	99	113	59	4	9	9	61	56	33
1874......	4,229	117	2 8	57	60	56	61	1	10	3	37	58	8
1875......	4,317	147	3.4	73	74	90	57	1	4	6	49	69	18
1876......	4,116	126	3.0	65	61	71	55	5	9	13	44	33	22
1877......	4,450	134	3.0	63	71	65	69	8	10	8	52	44	12
1878......	4,441	150	3.4	68	82	77	73	13	13	6	59	47	12
1879......	4,472	114	2.7	47	67	63	51	4	13	6	44	40	7
1880......	4,829	158	3.4	74	84	94	64	8	12	5	66	52	15
1881......	5,016	143	2.8	74	69	74	69	4	13	14	58	41	13
1882......	5,074	229	4.7	111	118	100	129	6	11	5	56	145	6
1883......	5,282	258	4.8	146	112	117	141	9	16	10	82	134	7
1884......	5,141	165	3.2	83	82	78	87	7	7	12	66	64	9
1885......	5,389	158	2.9	71	87	70	88	6	14	8	69	53	9
Total.....	87,546	3,211	3.7	1,563	1,648	1,759	1,452	122	216	214	1,166	1,212	282

The percentage of deaths from fever, in 1885, in proportion to total mortality, was smaller than in any year since 1879.

Sex.—Of the 158 decedents 71 were males, and 87 were females; or a proportion of about 82 males to every 100 females.

During the period of twenty-one years, 1865 to 1885, inclusive, the proportions of the sexes of the decedents from "fever," in Rhode Island, were 105.4 females to every 100 males.

Parentage.—There were 70 decedents from fever, of American parentage, in 1885, and 88 of foreign parentage, a proportion of about 56 of foreign and 44 of American in every 100 decedents.

The following Table shows the number of decedents from fevers, in each division of ages, in each of the last twenty-one years, in the State of Rhode Island:

Table LXX.

TYPHOID FEVER.	PERIODS OF LIFE.										
YEARS.	Under 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	35	18	46	54	30	14	18	7	5	2	....
1866	23	10	21	26	21	16	9	14	10	....	....
1867	17	6	23	33	12	11	8	4	2	2	1
1868	10	7	10	21	8	8	10	4	5	....	....
1869	10	8	14	28	9	7	9	8	6	2	....
1870	15	13	28	39	16	20	7	7	6	1	....
1871	13	10	20	28	18	16	9	4	5	2	....
1872	17	18	34	54	20	9	12	11	3	1	....
1873	27	12	34	31	25	13	13	7	8	2	....
1874	10	14	26	32	9	5	10	3	6	2	....
1875	23	14	19	43	18	10	10	6	4	...	....
1876	21	10	15	24	14	9	6	16	6	3	2
1877	22	13	13	36	20	8	5	7	2	2	1
1878	17	16	27	47	13	11	12	2	3	2	....
1879	19	7	14	26	15	6	3	12	8	3	1
1880	25	12	24	43	23	12	10	5	3	....	1
1881	25	9	19	27	14	11	9	12	11	4	....
1882	24	22	44	69	27	14	9	10	9	1	....
1883	36	25	46	75	31	12	11	10	8	2	2
1884	24	13	19	47	22	9	12	10	5	3	1
1885	35	12	16	25	26	11	11	12	6	4	....
Totals	448	269	512	818	391	232	203	171	121	38	9

Of the 3,211 decedents from fever, during the last twenty-one years, 1,229 were under 20 years of age, and 1,209 were between 20 and 40 years of age. There was, therefore, about 38 per cent. of the decedents under 20 years of age, and about the same per cent. between 20 and 40; or about 76 per cent. of the whole number of decedents from fevers were under 40 years of age.

Table LXXI.

Comparative exhibit of the percentages of deaths from Typhoid Fever, to total deaths from specified causes, in four New England States, for ten years, 1876–1885.

	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	Average per cent.
Rhode Island............	3.0	3.0	3.4	2.7	3.4	2.8	4.7	4.8	3.2	2.9	2.3
Massachusetts.	2.7	2.7	2.3	1.9	2.5	2.9	2.9	2.3	2.4	2.0	2.5
Connecticut.............	3.6	3.3	2.7	1.8	2.5	2.5	3.1	2.1	2.5	.....	2.7
Vermont	4.2	4.8	3.4	2.7	3.5	5.5	3.4	3.1	......	......	3.8

DISEASES OF THE HEART.

The number of decedents from diseases of the heart, as reported in 1885, was 349. The number is larger by 64 than that of 1884.

Sex.—There were 162 male decedents, and 187 female decedents; a proportion of 87 males to every 100 females.

Parentage.—Of the 349 decedents from diseases of the heart, in 1885, there were 198 of American parentage, and 151 of foreign, a proportion of 131 of American parentage to every 100 of foreign. This is in accordance with the invariable rule of the whole period of registration.

The following Table exhibits, for each of the last twenty-one years, 1865 to 1885, inclusive, the whole number of deaths in the State; the number and percentage, and the sex and parentage of the decedents from diseases of the heart, and the number of the same in each division of the State:

TABLE LXXII.

YEARS.	Whole Number of Deaths.	DISEASES OF THE HEART.											
				SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
		Diseases of the Heart.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865......	3,405	98	2.88	51	47	65	33	6	5	8	27	47	5
1866......	2,970	115	3.87	58	57	90	25	7	8	10	41	40	9
1867......	2,889	114	3.94	67	47	81	33	4	9	7	37	49	8
1868......	2,912	116	3.96	58	58	79	37	5	8	12	35	52	4
1869......	3,382	128	3.78	75	53	79	49	2	13	11	36	62	4
1870......	3,238	117	3.61	77	40	77	40	4	10	8	35	59	1
1871......	3,344	144	4.30	78	66	91	53	4	7	8	42	77	6
1872......	4,247	189	4.45	104	85	119	70	5	9	10	59	83	13
1873......	4,403	189	4.29	83	106	122	67	4	11	14	48	101	11
1874......	4,229	214	5.06	109	105	150	64	6	6	28	50	106	18
1875......	4,317	186	4.31	84	102	113	73	2	13	22	49	88	12
1876......	4,116	166	4.03	81	80	109	57	9	11	10	38	86	12
1877......	4,450	182	4.09	94	88	110	72	3	7	9	57	93	13
1878......	4,441	166	3.73	88	78	109	57	5	11	15	38	83	14
1879......	4,472	202	4.78	114	88	127	75	8	20	16	38	111	9
1880......	4,829	231	5.03	125	106	146	85	9	21	29	59	104	9
1881......	5,016	264	5.65	131	133	154	110	9	21	24	73	121	16
1882......	5,074	255	5.31	116	139	162	93	8	16	23	55	142	11
1883......	5,282	325	6.20	167	158	179	146	8	27	30	70	172	18
1884......	5,141	285	5.60	135	150	163	122	6	16	25	87	139	12
1885......	5,389	349	6.48	162	187	198	151	13	27	25	94	159	31
Total, 21 years...	87,546	4,035	4.54	2,062	1,973	2,503	1,532	127	276	334	1,068	1,984	236

Sex.—Of the 4,035 persons deceased from diseases of the heart, in the last twenty-one years, 2,062 were males, and 1,973 were females; or 104.5 males to each 100 females.

Parentage.—Of the 4,035 decedents, during twenty-one years, 2,503 were of American parentage, and 1,532 of foreign.

The proportions would, therefore, stand as follows:

To every 100 of foreign parentage there were about 164 of American; or 62 American and 38 of foreign parentage in each 100 deaths.

The following Table shows the number of decedents from diseases of the heart, in each divisional period of life, in each of the last twenty one years:

Table LXXIII.

YEARS.	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	14	4	6	7	22	17	19	9	......
1866	18	8	14	17	10	23	21	4	......
1867	11	11	10	13	22	16	27	4	......
1868	15	5	13	11	14	28	25	5	......
1869	21	4	14	18	20	22	21	7	1
1870	19	6	11	13	20	21	23	3	1
1871	9	12	10	19	23	36	28	6	1
1872	27	12	22	19	31	36	29	13	......
1873	19	11	28	18	25	35	42	9	2
1874	20	16	26	21	27	50	40	12	2
1875	14	16	25	20	32	29	41	9	......
1876	14	10	15	19	20	38	39	10	1
1877	15	11	20	18	27	45	33	13	......
1878	16	8	18	16	26	36	35	11	......
1879	19	9	13	25	33	51	36	16	......
1880	15	10	18	23	38	49	49	28	1
1881	32	13	26	23	37	49	53	21	......
1882	22	17	24	25	36	51	61	17	2
1883	39	13	21	33	52	65	76	26	......
1884	15	25	21	32	45	61	50	32	4
1885	38	13	24	42	61	69	78	24	......
Totals	412	234	379	442	621	827	826	279	15

The results of twenty-one years of registration, with record of ages of decedents from diseases of the heart, show in periods of twenty years of life, the following percentages:

Under 20 years of age	10.2 per cent.
Between 20 and 40	15.2 per cent.
Between 40 and 60	26.3 per cent.
Between 60 and 80	40.9 per cent.
Over 80	7.4 per cent.
	100.0 per cent.

It will be seen that about 41 per cent. of all the deaths from diseases of the heart were of persons over sixty years of age, and under eighty.

Diseases of the heart have acquired large importance as a cause of death. From 28.8 in every 1,000 deaths from all causes, in 1865, heart diseases have gradually increased to 64 in every 1,000, in 1885.

PNEUMONIA.

There were 465 decedents from pneumonia, in 1885. The number is 102 more than in 1884, and 65 more than in any previous year.

In 1875, however, the proportion to whole number of deaths was larger, that is, 9.3 in every one hundred; in 1885 it was 8.6 in every hundred.

Sex.—Of the 465 decedents from pneumonia, and including congestion of the lungs, 214 were males and 251 were females; or 85.2 males to each 100 females.

Parentage.—By parentage there were 271 of American and 194 of foreign parentage. The proportions of decedents from pneumonia were 140 of American to each 100 of foreign parentage.

Season.—There were 277, or 60 per cent., of the deaths that occurred during the first four months of the year. The largest mortality by months was 85 in April, and 82 in March.

The following Table shows, for each of the last twenty-one years, the whole number of deaths reported in Rhode Island; the number and the percentage, with the sex and the parentage of the decedents from pneumonia, and the number in each year, in each division of the State:

TABLE LXXIV.

YEARS.	Whole Number of Deaths.	PNEUMONIA.											
				SEX.		PARENTAGE		DIVISIONS OF THE STATE.					
		Pneumonia.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
1865......	3,405	175	5.1	80	95	110	65	8	11	21	49	74	12
1866......	2,970	193	6.5	94	99	127	66	13	17	13	59	81	10
1867......	2,889	172	5.9	68	104	103	69	8	12	12	56	68	16
1868......	2,912	191	6.6	99	92	120	71	9	5	16	54	92	15
1869......	3,382	190	5.6	104	86	110	80	7	10	10	63	88	12
1870......	3,238	182	5.6	102	80	96	86	6	12	15	55	78	16
1871......	3,314	218	6.5	104	114	129	89	12	21	11	68	85	21
1872......	4,247	229	5.4	119	110	125	104	11	1	9	74	120	14
1873......	4,403	234	5.3	127	107	143	91	11	9	10	65	123	16
1874......	4,229	250	5 9	118	132	143	107	6	13	7	73	136	15
1875......	4,317	400	9.3	199	201	243	157	14	27	25	105	198	31
1876......	4,116	339	8.2	164	175	162	177	13	23	16	97	163	27
1877......	4,450	226	5.1	104	122	127	99	10	7	14	81	98	16
1878......	4,441	317	7.1	143	174	176	141	10	11	18	110	140	28
1879......	4,472	311	7.4	148	163	163	148	7	15	15	103	156	15
1880......	4,829	364	7.9	180	184	177	187	26	16	18	92	192	20
1881......	5,016	327	6.5	177	150	190	137	10	23	17	81	174	22
1882......	5,074	344	7.2	178	166	163	181	10	22	24	91	176	21
1883......	5,282	400	7.8	192	208	198	202	19	21	34	108	204	14
1884......	5,141	363	7.1	167	196	192	171	10	13	17	125	172	26
1885......	5,389	465	8.6	214	251	271	194	15	20	33	151	227	19
Total, 21 years...	87,546	5,890	6.6	2,881	3,009	3,268	2,622	235	309	355	1,760	2,845	386

Sex.—Of the 5,890 decedents from pneumonia in twenty-one years, 1865 to 1885, inclusive, 2,881 were males and 3,009 were females; a proportion of 104.4 females to every 100 males.

Parentage.—In relation to parentage, there were of the 5,890 decedents 3,268 of American and 2,622 of foreign; or 124.6 of American parentage to every 100 of foreign.

TABLE LXXV.

Exhibiting the number of decedents from pneumonia, in each of the several periods of life, during each of the last twenty-one years, from 1865 to 1885, inclusive.

YEARS.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	65	4	2	....	14	11	15	17	21	21	5	....
1866	57	4	4	5	12	10	14	21	25	32	9	....
1867	57	9	2	3	10	11	13	16	25	13	12	1
1868	70	4	3	3	15	8	16	13	19	27	13	....
1869	64	11	1	2	11	12	9	28	25	16	11	....
1870	84	6	5	4	6	7	8	14	20	19	8	1
1871	71	7	2	7	10	17	16	16	35	17	19	1
1872	83	5	1	7	17	20	19	22	24	19	11	1
1873	105	4	8	3	10	14	16	17	24	23	10	....
1874	76	9	4	6	17	17	25	21	40	27	8	....
1875	120	9	3	8	22	30	35	39	61	43	28	2
1876	116	5	4	3	20	20	32	35	48	39	17	....
1877	79	2	....	7	15	15	24	27	22	24	9	2
1878	115	9	4	10	14	17	28	20	42	45	13	....
1879	102	8	1	3	14	27	26	35	38	38	9	....
1880	95	18	3	16	14	33	37	46	47	43	12	....
1881	102	4	2	5	15	22	26	45	48	31	26	1
1882	71	3	4	14	22	36	49	33	41	46	21	4
1883	88	15	2	13	32	33	40	53	49	46	27	2
1884	103	14	5	11	23	34	24	32	53	37	23	4
1885	121	9	10	8	23	29	50	49	76	59	29	2
Totals	1,844	159	70	138	346	423	522	599	783	665	330	21

Age.—Of the 5,890 decedents from pneumonia, during the period of twenty-one years, 1,844, or nearly one-third, were under five years of age. During the periods of life of over fifty years of age the number of decedents was 2,377, or about 40 per cent. of the whole number.

The following summary will present the percentages in round numbers:

Under five years of age	31 per cent.
Five years and under twenty	6 per cent.
Twenty years and under fifty	23 per cent.
Fifty years and over	40 per cent.

SCARLATINA.

The number of deaths returned as having been caused by scarlatina, in 1885, was 91.

Sex.—Of the 91 decedents from scarlatina 36 were males, and 55 were females.

Parentage.—There were 48 of American parentage, and 43 of foreign; or a proportion of about 90 of foreign parentage to every 100 of American.

During a period of twenty-one years there were 1,490 decedents from scarlatina of American parentage, and 1,726 decedents of foreign; or a proportion of 115.8 of foreign to each 100 of American parentage.

The following Table will present the statistics of scarlatina for each of the last thirty-one years, from 1855 to 1885, inclusive, the whole number of deaths in the State during that period, the number and percentage and sex of the decedents from scarlatina, and the number from scarlatina in each division of the State. It also shows, from 1865 to 1885, inclusive, the parentage of the decedents from scarlatina:

TABLE LXXVI.

YEARS.	Whole Number of Deaths.	SCARLATINA.											
				SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
		Scarlatina.	Per cent.	Males.	Females.	American.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Providence City.	Washington County.
10 years. 1855-1864.	25,870	1,266	4.9	611	655	......	......	46	62	189	334	568	57
1865......	3,405	255	7.5	130	125	134	121	33	17	3	86	108	8
1866......	2,970	28	0.9	15	13	12	16	5	......	8	12	3	......
1867.. ...	2,889	14	0.5	6	8	10	4	1	......	1	2	10	......
1868......	2,912	93	3.2	47	46	32	61	2	3	3	34	50	1
1869......	3,382	286	8.4	126	160	128	158	17	23	12	72	138	34
1870......	3,238	75	2.3	37	38	28	47	1	6	3	22	35	8
1871......	3,344	66	1.9	41	25	31	35	1	3	1	37	21	13
1872......	4,247	53	1.2	22	31	22	31	......	1	4	27	19	2
1873......	4,403	287	6.5	124	163	163	124	4	2	42	80	132	27
1874......	4.229	462	10.9	231	231	176	296	27	17	1	133	268	16
1875......	4,317	185	4.3	85	100	121	64	8	30	3	35	94	15
1876......	4,116	80	1.9	34	46	42	38	3	2	7	21	35	12
1877......	4.450	62	1.4	26	36	29	33	14	4	3	21	12	8
1878......	4,441	86	1.9	41	45	35	51	3	5	3	14	57	4
1879......	4.472	311	7.4	164	147	130	181	3	6	4	37	255	6
1880......	4.829	468	10.0	215	253	216	252	22	30	11	143	243	19
1881......	5,016	138	3.0	79	59	62	76	11	25	12	41	45	4
1882......	5.074	45	0.9	24	21	16	29	......	3	16	7	18	1
1883.....	5,282	34	0.6	17	17	14	20	1	1	5	9	16	2
1884......	5,141	97	1.8	39	58	41	56	......	......	8	28	57	4
1885......	5,389	91	1.7	36	55	48	43	......	3	6	24	38	20
Totals....	113416	4,482	4.1	2.150	2,322	*1.490	*1,726	202	233	345	1.209	2,222	251

* Twenty years.

COMPARATIVE RESULTS.

The following Table presents concisely the percentage of *total mortality* from *specified* causes of death, resulting from twenty-four *prominent* causes, as reported in 1885, in the whole State, and in the several divisions of the State, the percentage of each division computed on the mortality of that division:

TABLE LXXVII.

CAUSES OF DEATH.	Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Washington County.	Whole State, 1885.
Accidents (all kinds).........	2.70	1.68	2.10	1.90	2.97	3.84	4.19	3.09
Apoplexy and Paralysis.....	8.64	5.08	11.20	4.54	5.15	5.09	5.78	5.38
Brain, Diseases of...........	1.08	3.38	2.80	6.44	2.86	4.68	1.28	3.61
Bronchitis	2.70	.74	1.40	3.14	3.69	3.52	....	3.09
Cancer	4.32	2.53	1.40	2.27	3.48	4.09	4.21	3.59
Cholera Infantum...........	2.70	6.48	3.50	4.16	6.92	3.98	5.12	5.16
Consumption..	6.48	12.70	7.70	13.53	14.20	16.11	17.93	14.45
Convulsions.................	3.78	2.82	5.60	1.50	2.18	1.67	1.29	2.06
Croup........................	2.16	2.26	2.10	1.13	2.39	1.30	.64	1.74
Debility*.....	1.08	1.69	....	.76	1.05	.23	.97	.71
Diarrhœa	2.16	.56	2.10	.38	2.24	1.25	1.28	1.55
Diphtheria	2.70	1.41	4.20	....	2.03	1.71	2.24	1.83
Dysentery........	1.62	1.13	.70	.38	.99	.37	....	.68
Fevers....	3.24	3.96	3.50	1.14	3.53	2.45	2.57	2.93
Heart, Diseases of	7.02	7.61	4.89	6.76	4.89	7.35	9.94	6.48
Hooping Cough.	....	.28	....	1.50	.47	1.11	1.29	.79
Hydrocephalus	1.08	....	....	....	.31	.37	....	.31
Kidneys, Diseases of	4.32	2.81	4.90	3.75	2.12	4.06	1.61	3.14
Liver, Diseases of	1.08	1.70	....	1.88	.88	.74	.32	.87
Marasmus*.................	2.16	.85	.70	.38	.94	.23	.32	.62
Old Age........	4.86	9.02	12.60	11.02	4.52	3.25	7.05	4.95
Pneumonia..................	8.15	5.92	8.40	8.35	7.85	10.50	6.08	8.65
Scarlatina....................	....	.85	....	1.50	1.25	1.76	6.45	1.70
Stomach Diseases of.........	.54	.56	.70	.38	.62	.19	.97	.41

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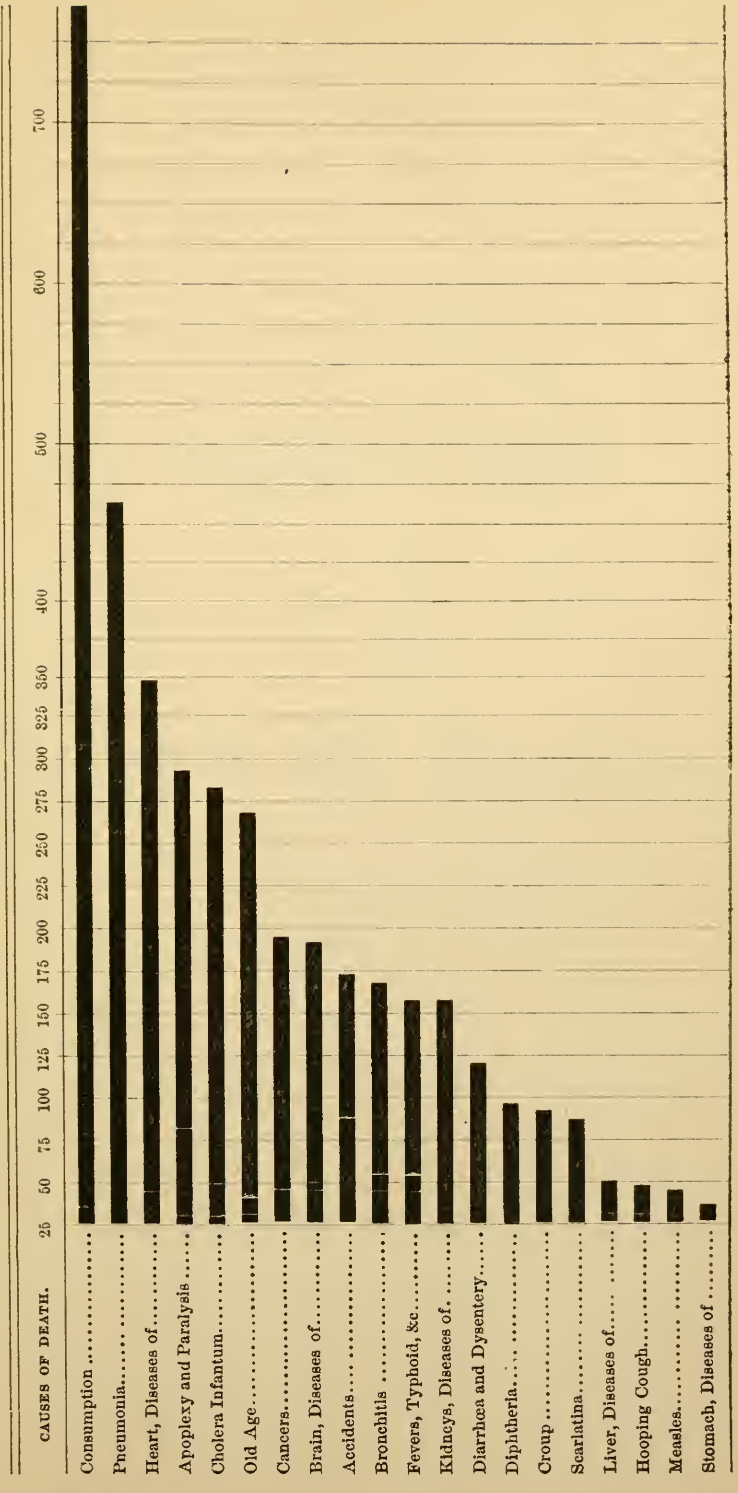
* Not including children under 5 years of age.

The following Table shows the percentages comparatively of several prominent causes of death. in the aggregate of total mortality from specified causes in Rhode Island, during a period of ten years, from 1876 to 1885, inclusive:

TABLE LXXVIII.

CAUSES OF DEATH.	YEARS.									
	1885.	1884.	1883.	1882.	1881.	1880.	1879.	1878.	1877.	1876.
Accidents (all kinds)...........	3.09	3.80	2.84	3.44	3.04	3.51	2.43	2.89	3.10	2.94
Apoplexy and Paralysis........	5.38	5.78	5.39	5.52	5.23	4.67	5.21	4.45	4.25	4.22
Brain, Diseases of..............	3.61	2.97	3.50	3.60	3.84	3.44	3.73	3.28	3.68	3.75
Bronchitis	3.09	2.29	2.04	2.08	1.80	1.98	1.47	1.89	1.62	1.46
Cancer....	3.59	3.03	3.30	2.75	3.11	2.72	2.96	2.82	3.17	2.72
Cholera Infantum..............	5.16	6.31	4.73	6.77	5.15	5.43	3.81	3.97	6.08	6.41
Consumption	14.45	14.34	15.01	15.33	15.12	14.02	15.09	15.98	15.52	16.78
Convulsions	2.06	2.70	2.47	2.29	2.18	2.88	2.47	2.65	1.95	2.28
Croup	1.74	1.55	1.40	1.60	2.16	1.45	2.28	2.20	2.23	2.61
Debility..........	2.45	2.87	1.14	2.69	2.61	3.09	2.35	1.91	2.65	2.80
Diarrhœa	1.55	2.20	2.55	1.87	1.65	1.52	1.26	1.25	2.11	1.87
Diphtheria......................	1.83	2.31	1.88	2.10	4.63	3.40	6.14	10.28	11.56	4.07
Dysentery	.68	.78	1.06	1.42	.90	.61	1.04	.95	1.22	1.28
Fevers..........................	2.93	3.24	5.12	4.60	3.05	3.37	2.70	3.94	3.55	3.69
Heart, Diseases of..............	6.48	5.60	6.35	5.31	5.68	5.03	4.78	3.92	4.28	4.25
Hooping Cough.................	.79	.83	.17	1.48	1.46	.44	1.02	1.28	.75	1.23
Hydrocephalus.................	.31	.81	.87	1.02	1.20	1.01	1.36	1.65	1.29	1.74
Kidneys, Diseases of...........	3.14	2.52	2.43	1.79	1.69	2.02	1.88	1.89	1.57	1.28
Liver, Diseases of..............	.87	.88	.83	1.21	.82	1.20	1.17	1.06	1.06	1.13
Marasmus.......................	2.15	1.62	2.02	1.62	1.11	1.27	1.16	1.30	.99	1.13
Old Age.........................	4.95	5.68	5.22	5.89	5.29	5.95	5.22	5.25	5.00	6.18
Pneumonia	8.65	7.14	7.84	7.16	7.01	7.90	7.37	7.49	5.31	8.69
Scarlatina.....	1.70	1.88	.64	.94	2.96	9.99	7.37	2.03	1.46	2.05

Diagram IV. Exhibiting the comparative mortality by absolute number of decedents, from twenty principal causes of death in Rhode Island, in 1885.



NOMENCLATURE OF DISEASES,

OR

CAUSES OF DEATH.

NAMES OF CAUSES OF DEATH.

It should be stated that the nomenclature of diseases in the nosological arrangement on the following pages is not intended to include the names of the whole list of morbid phenomena affecting the human organism, but the names of such only as are directly the **cause of death,** or such as ordinarily predispose to or set in motion the morbid processes that end in death.

In the construction of the classification now adopted, use has been made of the results and conclusions of a committee of the Royal College of physicians of England, and from such other sources as were accessible, and from examination of the classifications in use in different countries in Europe and America. It has been the design to have all these classifications based on observed facts and most advanced conclusions in relation to pathological processes and morbid conditions, inductive, causative, progressive and ultimate.

The statistical nosology will consist of two lists of causes of death,

A TABULAR LIST AND SUPPLEMENTAL LIST.

The Tabular List comprises the chief or primary causes of death which will be used in Table X on Classification and Percentage in the preparation of the Registrar's Annual Reports, and will, therefore, include all those named in the Supplemental List, when the final arrangement is completed.

The Supplemental List is subordinate to the Tabular List, and contains synonyms, or names of related diseases, which may be actually, or are supposed to be, causes of death, and which are in addition to those in the Tabular List, and which are often found in Physician's **certificates of death,** as reported to the State Registrar. These will have a place, in alphabetical order, in Tables VIII and IX in the reports, and will be variously grouped under different heads in Table X, as the figure which precedes each cause in the Supplemental List will correspond with the figure of the head in the Tabular List under which that cause is placed.

NOMENCLATURE OF CAUSES OF DEATH.

CLASSES.

I. General Diseases.—A.	SPECIFIC AND FEBRILE.	(*Zymotic.*)
II. General Diseases.—B.	CACHECTIC.	(*Constitutional.*)
III. Special Diseases. —A.	FUNCTIONAL OR ORGANIC.	(*Local.*)
IV. Special Diseases. —B.	DEVELOPMENTAL.	(*Developmental.*)
V. Violent Deaths. —	FROM INJURIES.	(*Violence.*)

SUB GROUPS OR ORDERS.

CLASS I.—Zymotic Diseases.

Order one, Miasmatic. Order two, Enthetic. Order three, Dietic. Order four, Parasitic.

CLASS II.—Constitutional Diseases.

Order one, Diathetic. Order two, Tubercular.

CLASS III.—Local Diseases.

Order one, Diseases of the Nervous System. Order two, Organs of Circulation. Order three, Organs of Respiration. Order four, Organs of Digestion. Order five, Urinary Organs. Order six, Reproductive Organs. Order seven, Osseous and Locomotory Organs. Order eight, Integumentary System.

CLASS IV.—Developmental Diseases.

Order one, Of Children. Order two, Of Women. Order three, Of Old Age. Order four, Of Nutrition.

CLASS V.—Violent Deaths.

Order one, Accidents and Negligence. Order two, Homicide. Order three, Suicide.

STATISTICAL NOSOLOGY.

CLASS I.—Zymotic Diseases.

TABULAR LIST.

For Table X of the Registration Report.

ORDER One.—Miasmatic.

I. One.—1. Carbuncle
2. Cholera, Asiatic
3. Cholera, Sporadic
4. Cholera Infantum
5. Cholera Morbus
6. Croup (Pseudo Membranous)
7. Diphtheria
8. Diarrhœa
9. Dysentery
10. Erysipelas
11. Fever, Bilious
12. Fever, Cerebro Spinal
13. Fever, Intermittent
14. Fever, Malarial
15. Fever, Typhoid
16. Fever, Typho-Malarial
17. Fever, Unspecified
18. Fever, Yellow
19. Influenza (Epidemic)
20. Measles
21. Mumps
22. Metria (Puerperal Fever)
23. Pertussis
24. Tonsillitis
25. Scarlatina
26. Small Pox
27. Varicella

ORDER Two.—Enthetic.

I. Two.—1. Glanders
2. Gonorrhea
3. Hydrophobia
4. Malignant Pustule
5. Septicæmia
6. Syphilis

ORDER Three.—Dietic.

I. Three.—1. Alcoholism
2. Delirium Tremens
3. Inanition
4. Purpura and Scurvy

ORDER Four.—Parasitic.

I. Four.—1. Apthæ
2. Worms
3. Other Parasites

SUPPLEMENTAL LIST.

Synonyms or Related Diseases.

ORDER One.—Miasmatic.

I. One.—1. Anthrax.
Gangrenous Boil.
4. Entero Colitis, } Infantile.
Gastro Enteritis, }
10. Hospital Gangrene.
Pyemia.
Phagadena.
Phlegmon.
15. Infantile Fever.
Typhus Fever.
20. Rotheln.
21 Parotitis.
22. Child-bed Fever.
23. Hooping Cough.
24 Quinsy.
25. Scarlet Fever.
Angina Maligna.
26. Varioloid.
27. Chicken Pox.
Miliaria.

ORDER Two.—Enthetic.

I. Two.—2. Stricture of the Urethra.
Gonorrheal Opthalmia.
5. Necusia.

ORDER Three.—Dietic.

I. Three.—1. Intemperance.
3. Privation.
Starvation.
Neglect.

ORDER Four.—Parasitic.

I. Four.—1. Thrush.
2. Tape Worm.
Trichianasis.
3. Scabies.
Hydatids.
Porrigo, Favus, etc.

CAUSES OF DEATH.

CLASS II.—Constitutional Diseases.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER One.—Diathetic.	
II. One.—1. Gout 2. Dropsy 3. Anæmia 4. Cancer, Various 5. Cancer of Breast 6. Cancer of Stomach 7. Cancer of Uterus 8. Noma (Canker) 9. Mortification 10. Rheumatism	II. One.—2. Anasarca. 3. Leucocythæmia. Chlorosis. 4. Soft Cancer. Epithelioma. Melanosis. Lupus. Other kinds of Cancer. 9. Bed-sore. Dry Gangrene. 10. Rheumatic Carditis. Rheumatic Synovitis. Rheumatic Meningitis.
ORDER Two.—Tubercular.	
II. Two.—1. Scrofula 2. Tabes Mesenterica 3. Phthisis (Pulmonary) 4. Hydrocephalus 5. Tubercular Meningitis	II. Two.—1. Psoas (Lumbar) Abscess. White Swelling. Cretinism (Goitre). Adenitis. Morbus Coxarius. Pott's Disease. 2. Tubercular Peritonitis. 3. Hæmoptysis.

CLASS III—Local Diseases.

ORDER One.—Nervous System.	
III. One.—1. Cephalitis 2. Cerebritis 3. Apoplexy 4 Paralysis 5. Insanity 6. Chorea 7. Epilepsy 8. Tetanus 9. Convulsions 10. *Brain Diseases**	III. One.—1. Phrenitis. Meningitis. Cerebro Spinal Meningitis. (Sporadic.) 5. Monomania. Fright. Grief. Melancholia. Dementia. Rage. 6. Hysteria. 8. Laryngismus. Lockjaw. Trismus Nascentium. 10. Neuralgia, Cerebral. Neurasthenia. Disease of Spinal Cord. Necrencephalus (Ramollissement). Thrombosis, Cerebral.
ORDER Two.—Circulatory System.	
III. Two.—1. Pericarditis 2. Aneurism 3. *Heart Diseases**	III. Two.—1. Carditis. Endocarditis. 3. Hypertrophia. Atrophia. Angina Pectoris. Syncope. Arteritis. Ossification of Arteries. Phlebitis. Hydropericardium. Embolus. Thrombosis.

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* Not otherwise placed.

STATISTICAL NOSOLOGY.

CLASS III.—Local Diseases.—Continued.

ORDER Three.—Respiratory System.

TABULAR LIST.	SUPPLEMENTAL LIST.
III. Three.—1. Epistaxis	III. Three.—2. Œdema Glottidis.
2. Laryngitis	5. Empyema.
3. Bronchitis, Acute.	Diaphragmitis.
4. Bronchitis, Chronic	Pneumothorax.
5. Pleurisy	Hydrothorax.
6. Pneumonia	6. Pulmonary Apoplexy.
7. Asthma	Hæmoptysis.†
8. *Lung Diseases**	Congestion of Lungs.
	7. Grinders' Asthma.
	Miners' Asthma.
	Emphysema.

ORDER Four.—Digestive System.

TABULAR LIST.	SUPPLEMENTAL LIST.
III. Four.—1. Gastritis	III. Four.—1. Glossitis.
2. Enteritis	Stomatitis.
3. Peritonitis	Pharyngitis.
4. Ascites	Œsophagitis.
5. Ulceration of Intestines	2. Gastro Enteritis, Entero Colitis, Not Infantile.
6. Hernia	5. Perforation of—
7. Ileus	6. Congenital.
8. Intussusception	Femoral.
9. Stricture of Intestines	Inguinal.
10. Fistula	Scrotal.
11. *Stomach Diseases**	Umbilical.
12. *Pancreas Diseases**	Ventral.
13. Hepatitis	7. Constipation.
14. Jaundice	Obstipation.
15. *Liver Diseases**	Perityphlitis.
16. *Spleen Diseases**	Typhlitis.
17. *Bowel Diseases**	9. Strict Œsophagus.
	11. Dyspepsia.
	Pyrosis.
	Gastralgia.
	Hæmatemesis.
	Melæna
	14. Gall-stones.
	15. Cirrhosis.

ORDER Five.—Urinary System.

TABULAR LIST.	SUPPLEMENTAL LIST.
III. Five.—1. Nephritis	III. Five.—3. Albuminuria.
2. Ischuria	6. Cystirrhœa.
3. Nephria (Bright's Disease)	8. Diuresis.
4. Diabetes	Hæmaturia.
5. Calculus (Gravel, &c.)	Uræmia.
6. Cystitis	9. Urethritis.
7. Prostate, Disease of	10. Orchitis.
8. *Kidney Diseases**	
9. Bladder, Diseases of	
10. Testicles, Disease of	

ORDER Six.—Generative System.

FEMALE.

TABULAR LIST.	SUPPLEMENTAL LIST.
III. Six.—1 Ovarian Dropsy	III. Six.—1. Ovarian Tumor.
2. *Diseases of Uterus**	2. Hysteritis, Metritis.
	Uterine Ulcer.
	Polypus, Tumor.
	Ovaritis.
	Pelvic Cellulitis.

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* Not otherwise placed.

† See Class II, Order Two—3, Sup. List.

CAUSES OF DEATH.

CLASS III.—Local Diseases.—Continued.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER Seven.—**Osseous and Locomotory System.**	
III.— Seven. 1. Bones, Diseases of . .	III. Seven.—1. Ostitis. Periostitis. Fragilitas Ossium. Mollities Ossium. Rickets. Caries, Necrosis. Exostosis.
2. *Joint Diseases** . . .	2. Synovitis. Hip Disease.†
3. Vertebræ, Diseases of . .	3. Spine Disease. Spine, Caries and Necrosis.
ORDER Eight.—**Integumentary System.**	
III. Eight.—1. Phlegmon‡	III. Eight.—1. Abscess, part not stated. Boil. Whitlow.
2. Ulcer	
3. *Skin Diseases** . . .	3. Roseola. Urticaria. Eczema. Herpes. Pemphigus. Ecthyma. Impetigo. Psoriasis, &c. Dermatitis (from burns, &c.).
ORDER Nine.—**Organs of Special Sense.** EYE AND EAR.	
III. Nine.—1. Malignus Oculi . . .	
2. Opthalmitis	
3. Ossis Petrosis . . .	
4. Otitis	

CLASS IV.—Developmental Diseases.

ORDER One.—**Developmental Diseases of Children.**	
IV. One.—1. Still-born	
2. Debility, Infantile . .	IV. One.—2. Asthenia.
3. Debility, Premature Birth .	
4. Cyanosis	4. Atelectasis Pulmonum.
5. Spina Bifida. . . .	
6. Other Malformations . .	6. Anus Imperforatus. Cleft Palate. Idiocy.
7. Teething	
8. Innutrition	8. Malnutrition.

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* Not otherwise placed. † See Class II, Order Two—1, Sup. ‡ See Class I, Order One—10, Sup.

STATISTICAL NOSOLOGY.

CLASS IV.—Developmental Diseases.—Continued.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER Two.—Developmental Diseases of Women.	
IV. Two.—1. Paramenia	IV. Two.—1. Amenorrhœa. Chlorosis.† Climacteria. Menorrhagia.
2. Childbirth*	2. Miscarriage. Abortion. Puerperal Mania. Puerperal Convulsions. Phlegmasia Dolens. Cæsarian Operation. Extra-uterine Fœtation. Flooding. Retention of Placenta. Presentation of Placenta. Deformed Pelvis. Mammary Abscess.
ORDER Three.—Developmental Diseases of Old People.	
IV. Three.—1. Old Age	
ORDER. Four.—Diseases of Nutrition. Adolescent and Adult.	
IV. Four.—1. Atrophy	IV. Four.—1. Marasmus. Malnutrition.
2. Debility	2. Asthenia. Exhaustion.

CLASS V.—Violent Deaths.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER One.—Accident or Negligence	
V. One.—1. Fractures and Contusions	V. One.—1. Railroad and other Accidents.
2. Wounds, Unspecified	
3. Burns and Scalds	
4. Poison	
5. Drowning	5. Lost at Sea.
6. Suffocation	6. Asphyxia. Strangulation.
7. Various	7. Exposure. Cold Water. Frozen. Heat. Lightning. Surgical Operation.
ORDER Two.—Homicide.	V. Two.—1. Infanticide. Patricide. Matricide. Fratricide. Filicide, &c.
ORDER Three.—Suicide.	
V. Three.—1. Wounds, Unspecified	
Wounds, Pistol or Gunshot	
Wounds, Knife	
2. Poison	
3. Drowning	
4. Hanging	
5. Otherwise	

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* See Class I, Order One—22, Tab. List.

† See Class II, Order One—3, Sup.

Suggestions concerning physicians' certificates of death. It should be the endeavor to specify the causes of death as definitely and correctly as possible. It is not unusual to find a return of death with the physician's certificate, naming the cause of death, "Paralysis," "Paraplegia," "Fits," "Convulsions," "Dropsy," &c., which are merely secondary or consecutive causes, simply symptoms only, or results of some organic lesion or pathological derangement. Sometimes **the alleged cause** is really the *final cause*, as in a case of termination of life by paralysis, but the cause given as paralysis **is not the determining cause.** Apoplexy, or some lesion of the nervous centres, must be the original and determining cause of paralysis, paraplegia, hemiplegia, &c., and the determining cause should be stated as the primary in the return or certificate.

Convulsions are the symptoms or results of some antecedent or concurrent disease. They follow meningitis and other structural lesions of the nervous centres: they also occur from reflex derangement or disturbance of the nervous centres, as in children, from intestinal irritation, or from inflammation, as in gastritis, enteritis, nephritis, &c. In such cases they may be contributory to death, and perhaps, in rare instances, a final cause, by inducing or taking the form of tonic or tetanic spasm. But as contributory, or as a final cause, they are simply concomitant. They should find place as secondary causes only in certificates of death.

"Fits" is too unmeaning a term to be used in any case. The word in a medical sense literally means an attack, an occurrence, or succession of attacks of some physical or mental disturbance, as "fits of sickness," "fits of melancholy, &c.," and is not properly used as synonymous with convulsions from any cause. It would be just as sensible to attribute a death to an "occurrence" or an "attack" as a cause, as to "fits," without other qualifications.

"Dropsy" and "Ascites" have been allowed to stand as determining causes of death because of extended use, and because of the obscurity with which their causes in rare instances are involved. We can scarcely conceive of a dropsical accumulation without antecedent organic or functional disorder, derangement of the absorbent or secretory system, or depravation of the blood. They are left in the tabular list with not a little reluctance. Paralysis is also left in the tabular list for a like reason, and with the same doubt of propriety.

It may be suggested that it is sometimes difficult, and occasionally impossible, to ascertain positively the chief or leading cause of death. The physician last in attendance may find several functional or structural diseases, the morbid conditions multiple and complex, and not only the initial derangement, but the succession of morbid processes, proximate, consecutive and ultimate, inextricably entangled and lost to discovery.

The careful diagnostician will, however, even then be able to *conceive the probable leading cause*, but, whether or not, he will be able at least **to ascertain the most prominent and controlling lesion or functional derangement then existing,** and which may reasonably be accepted as the primary cause of death.

The preceding remark applies very properly to cases of adventitious diseases which prove fatal, when occurring in individuals already suffering from some chronic disease of slower progress, as when fatal dysentery attacks a consumptive person, or one having chronic nephritis dies from pneumonia. **The acute disease** occurring independently of the chronic disease **is the chief cause of death,** although the fatal event may have been made more sure by the existence of the antecedent disease, and although the antecedent disease would have ultimately caused death.

In attributing death to scrofula, tuberculosis, tumor, cancer and other generic terms, as causes, **the organic structure or locality where the disease is developed** should always be given, otherwise such terms are very indefinite, and discredit the acquirements of the certifying physician.

The objects desired in presenting the preceding nomenclature of causes of death, and the suggestions following, are to subserve the purpose of greater uniformity in the use of nosological terms, and to promote the accomplishment of entire definiteness, accuracy, and completeness in the physicians' certificates of causes of death.

The State of Rhode Island has a leading reputation for the completeness of its vital statistics. It is not excelled by any State in the Union. With the exception of two or three, there are no States that have approximate completeness of numbers of decedents, and fullness of statements of fact connected therewith. It is hoped that the physicians of Rhode Island will feel a professional and patriotic interest in the further elevation of the reputation of the State as a collector of accurate and complete vital statistics.

THE LAWS OF RHODE ISLAND

IN RELATION TO THE REGISTRATION OF

BIRTHS, MARRIAGES AND DEATHS,

AND OF DIVORCE.

PUBLIC STATUTES, CHAPTER 85.

OF THE REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES.

SECTION 1. The town clerks of the several towns, or any person whom the board of aldermen of any city, or the town council of any town may appoint for that purpose, shall obtain, chronologically record and index, as required by the forms prescribed by section three of this chapter, all information concerning births, marriages and deaths occurring among the inhabitants of their respective towns; and on or before the first Monday in March, annually, shall make duly certified returns thereof to the secretary of the state board of health for the year ending on the thirty-first day of December next preceding, accompanying the same with a list of the persons required by law to make returns to them, who have neglected to do so, and with such remarks relating to the object of this chapter as they may deem important to communicate.

SEC. 2. The secretary of the state board of health shall receive the returns made in pursuance of the preceding section, and annually make a general abstract and report thereof, in form as prescribed by section three of this chapter, and publish not exceeding one thousand copies thereof, and for preparing, tabulating and publishing said annual report the sum of five hundred dollars shall be paid to the state registrar. Said returns, after such report is prepared, shall be deposited in the office of the secretary of state, who shall cause the same to be arranged, full alphabetical indices of all the names to be made, and the whole to be bound in volumes of convenient size and carefully preserved in his office.

SEC. 3. The blank forms required to carry out the provisions of this chapter shall, on application, be furnished by the secretary of the state board of health, to clergymen, physicians, undertakers, town clerks, clerks of meetings of the

Society of Friends and other persons requiring them, substantially as follows: The record of a birth shall state the date and place of birth, name and sex of the child, whether born alive or still-born, the name and surname, color, occupation, residence and birthplace of the parents, and the time of recording, so far as the same can be ascertained. The record of a marriage shall state the date of the marriage, place, name, residence and official station of the person by whom married, names and surnames of the parties, age, color, occupation and residence of each, condition, that is whether single, widowed or divorced, what marriage, that is whether first, second, third or other marriage, the occupation, birthplace and name of their parents, and the time of recording, so far as the same can be ascertained. The record of deaths shall state the date of death, name and surname of the deceased, the sex, color and condition, whether single or married, age, occupation, place of death, place of birth, names and birthplace of parents, disease or cause of death, and the time of recording, so far as can be ascertained.

SEC. 4. Every meeting of the Society of Friends, clergyman, and all others authorized to join persons in marriage, shall make a faithful record of every such rite performed by them, in manner and form aforesaid, and return the same for the last preceding month, on or before the second Monday of every month, to the town clerk of the town in which such rite shall have been performed; and no marriage shall be solemnized until the parties shall have signed and delivered to the person about to solemnize it, or to the clerk of a meeting of the Society of Friends, a certificate containing the information required for the record of a marriage, as prescribed by this chapter.

SEC. 5. The town clerk of every town shall annually, in the month of January, collect the information required by this chapter, in relation to all children born in the town during the year ending on the thirty-first day of December next preceding.

SEC. 6. Whenever any person shall die, or any still-born child shall be brought forth in this state, the physician attending at such bringing forth or last sickness, if any physician so attended, shall, within forty-eight hours after such death or bringing forth, leave with the family, if any, or person having the care of the deceased, or the person bringing forth such still-born child, or give to the undertaker or person who conducts the funeral a certificate stating, in case of a death, the name of the deceased, the date of the death, and the disease or cause of the death, and in case of the bringing forth of a still-born child, the date and the cause of such child being brought forth still-born.

SEC. 7. Every town council may appoint a sufficient number of persons to act as undertakers, removable at the pleasure of such council.

SEC. 8. No undertaker or other person shall conduct a funeral, or bury or deposit in a tomb, or remove from this state, or otherwise dispose of the remains of any deceased person or still-born child unless he shall first obtain the physician's certificate required by section six of this chapter, if a physician was in attendance upon such person who has deceased, or the person bringing forth such still-born child, and shall return the same, together with his own certificate of the information required by section three of this chapter, to the town clerk of the town where such death or bringing forth took place.

Sec. 9. Any town may make ordinances more effectually to attain the objects herein contemplated.

Sec. 10. The town clerks, or persons appointed as aforesaid, shall receive for each record of a death made and returned as required by law, and for each record of a marriage made and returned as required by law, twenty cents, to be paid to them out of their respective town treasuries: *Provided*, that the yearly compensation to be paid out of the town treasury as aforesaid, to any one town clerk or person appointed as aforesaid, who shall perform the duties prescribed by this chapter shall not be less than five dollars. Undertakers and others making returns of deaths as required by section eight of this chapter, shall receive for each full report of a death made to the town clerk, five cents in the cities of Providence and Newport, and ten cents in the other towns of the state.

Sec. 11. Every clergyman, physician, undertaker, town clerk, clerk of any meeting of the Society of Friends, or other person who shall wilfully neglect or refuse to perform any of the duties imposed on or required of him by this chapter, shall be fined not exceeding twenty dollars for each offence, one-half thereof to the use of the town in which the offence shall occur, and one-half thereof to the use of the person who shall complain of the same.

Sec. 12. Every clergyman, physician, coroner, undertaker, or clerk of any meeting of the Society of Friends, shall cause his name and residence to be recorded in the town clerk's office of the town where he resides.

Sec. 13. No letters of administration or letters testamentary shall be granted by any court of probate, upon the estate of any person, until the death of such person, or the facts from which the same is presumed, shall be duly certified, as near as may be, to the town clerk, in order that the same may be duly registered according to the provisions of this chapter.

Sec. 14. The town clerks of the several towns, the city clerk of the city of Newport, and the city registrar of the city of Providence, shall have the custody of all records of births, deaths and marriages of their respective towns, whether made under the statutes now in force or any former statute, and a certificate signed by them, certifying that any written or printed statement of any marriage, birth or death is a true copy of the record in their custody, shall be admitted as evedence of such marriage, birth or death.

Sec. 15. Births, marriages and deaths of non-residents shall be distinguished from those of residents, in the returns, by being arranged separately.

Sec. 16. The secretary of the state board of health may, from time to time, vary the forms of returns, and require such additional information as he may consider necessary to accomplish the object of this chapter.

Sec. 17. The town clerks or other officers appointed under this chapter to collect, record and return the births in the several towns, shall receive fees therefor as follows: For making record and return of these facts as required by law, twenty cents each for the first fifty entries in each calendar year, and ten cents each for each subsequent entry and return; to be paid by the town in which the birth is recorded.

Sec. 18. The town clerks of the several towns, or other persons appointed under this chapter to collect the births in the several towns, shall annually in the month of January, collect the facts concerning the births within their respective towns, required by this chapter; and shall, so far as practicable, at the same time collect the names of all persons liable to be enrolled in the militia, as required by title thirty.four; and the census of all persons between the ages of five and fifteen years inclusive, as provided by chapter fifty; and shall receive therefor such compensation as the town council or the board of aldermen of their respective towns or cities shall determine; *Provided,* that the city of Providence shall be exempt from so much of the provisions of this section as relates to the collection of the statistics of births.

Sec. 19. Blanks for the foregoing purposes shall be furnished, on application therefor, on or before the first day of December in the year preceding, by the state board of health for the collection of births, by the adjutant-general for the taking of the enrolled militia, and by the commissioner of public schools for the census aforesaid.

Sec. 20. The person or persons who shall discharge the duties required by section eighteen of this chapter, if other than the town clerk, shall make full return thereof to the town clerk of his or their town, on or before the tenth day of February next following.

Sec. 21. The returns required to be made by clerks of the supreme court, in relation to divorces, to the secretary of the state board of health, or a prepared abstract thereof, shall be published in the annual report on the births, marriages and deaths in the state.

SYNOPSIS OF THE LAW OF MARRIAGE.

CHAPTER 163, PUBLIC STATUTES.

Sections 1, 2 and 3 show what kindred persons cannot marry, and declare marriages within prohibited degrees null and void.

Section 4 makes an exception in favor of Jews, within the degrees of affinity or consanguinity allowed by their religion.

Section 5 declares the marriage of persons having a husband or wife living, and of idiots and of lunatics, absolutely void.

SEC. 6 "Any ordained minister or elder of any religious denomination, who shall be *domiciled* in this state, and either justice of the supreme court, may join persons in marriage in any town in the state." (It will be seen that clergymen from other states *cannot* LAWFULLY *solemnize marriages* in Rhode Island.)

SECTION 7 defines what shall be understood by the term "religious denomination," within the meaning of the preceding section.

SEC. 8. Wardens in the town of New Shoreham may join persons in marriage in said town.

SECTION 9 provides that no minister, elder, magistrate or warden shall join persons in marriage, unless such persons, ***if residents of this state,*** shall first present (to the clergyman or other person officiating) a certificate properly executed and signed by the town or city clerk or city registrar of the town or city in which ***EACH of such persons shall RESPECTIVELY reside,*** and ***if not residents of this state,*** then from the town or city clerk or registrar of *the town or city in which the marriage shall be solemnized*, to the effect that the said town or city clerk or registrar has ***duly recorded the intention*** of marriage between the parties named in the certificate, the said certificate also setting forth the names and surnames of the parties, the age, color, occupation, birthplace and residence of each, whether either or both have been before married, and, if before married, whether the marriage intended is the first, second, third or other marriage, and also whether the condition of either or both persons previously married is that of a divorced person, and the names, occupation and birthplace of each of their parents; and no town or city clerk or city registrar shall issue such certificate to any minor or person under guardianship, unless the consent in writing of the parent or guardian shall have been first obtained thereto, provided, however, such certificate may be issued to a female over eighteen years of age, who has no parent or guardian living in the United States. (The legal minority of both sexes terminates at the age of twenty-one.)

SECTION 10 provides that every Society of Friends, and *every person* authorized to join persons in marriage *shall certify* upon the certificate required in section nine of this chapter *the time when* and *the place where* the marriage shall have been solemnized by him, and SHALL *on or before the second Monday of every month*, return the certificate of every marriage solemnized by him during the last preceding month, to the *clerk or registrar* of the TOWN OR CITY *in which such rite shall have been performed.*

SECTION 11 forbids the solemnization of the marriage ceremony, by any person, when lawful objection is made thereto in writing, until such lawful objection be removed.

SECTIONS 12 and 13 provide that any person who shall join persons in marriage without first receiving the certificate required in section nine of this chapter, or otherwise contrary to or in violation of chapter 163 of the Public Statutes, shall be imprisoned not exceeding six months, or fined not exceeding one thousand dollars.

Section 14 provides that ALL PERSONS married without duly proceeding as required by chapter 163, shall be fined not exceeding fifty dollars.

Sec. 15. The solemnization of marriage shall be in the presence of two witnesses at least, besides the minister, elder or magistrate officiating.

Section 16 relates to marriages among Quakers or Friends and among Jews, making them valid if in accordance with the forms, rites and ceremonies of the same respectively.

Section 17 provides that at least one of the parties to any marriage solemnized according to the manner and form of the Society of Friends, or rites and ceremonies of the Jewish religion shall, before the celebration thereof, sign and deliver to the town or city clerk or city registrar of the town or city in which such marriage is solemnized, the certificate required in section nine.

CHAPTER 167.

OF DIVORCE.

Section 1. Divorces from the bond of marriage shall be decreed in case of any marriage originally void or voidable by law, and in case either party is for crime deemed to be or treated as if civilly dead, or, from absence or other circumstances, may be presumed to be naturally dead.

Sec. 2. Divorces shall be decreed for impotency, adultery, extreme cruelty, wilful desertion for five years of either of the parties, or for such desertion for a shorter period of time in the discretion of the court, for continued drunkenness, for neglect or refusal on the part of the husband, being of sufficient ability, to provide necessaries for the subsistence of his wife; and for any other gross misbehavior and wickedness in either of the parties, repugnant to and in violation of the marriage covenant.

Sec. 3. Whenever it shall appear that the absence, adultery, cruelty, desertion or other cause of complaint, as aforesaid, was committed or occasioned by the collusion of the parties, and done and contrived with an intention to procure a divorce, in such case no divorce shall be decreed.

Sec. 4. Whenever a divorce shall be had for the causes of affinity, consanguinity, impotency, idiocy, lunacy, or crime of either of the parties, the wife shall have restored to her all her lands, tenements and hereditaments; and a judgment may be passed for a restoration to her of all or such part of the personal estate specifically, or the value thereof, which has come to the husband's hands by virtue of the marriage, as the court from the circumstances of the case shall deem equitable.

Sec. 5. Whenever the divorce shall be occasioned by adultery, or other of the causes aforesaid, done or committed on the part of the wife, the husband shall hold the personal estate not secured to her by law, forever, and her real estate not secured to her by law, during his natural life, in case they have had issue born alive of her body during the marriage, otherwise during her natural life only, if he shall survive her.

SEC. 6. The court may, in such case, allow the wife for her subsistence so much of her real and personal estate as they shall deem necessary or proper.

SEC. 7. Whenever a divorce is granted for adultery, or crime on the part of the husband, the wife shall be entitled to dower in the same manner as if he were dead, unless the court shall decree alimony, chargeable upon the estate of the husband, instead of such dower.

SEC. 8. Whenever a divorce shall be had for adultery, or for any of the causes aforesaid, done or committed on the part of the husband, the wife shall continue to hold all her property, real and personal, secured to her by law, free from any right in or control over her disposition of the same, either during her life or at her death; and, if there be no issue living, shall be restored to all other her lands, tenements and hereditaments, if any there be.

SEC. 9. In such case the wife shall also be allowed out of the real or personal estate of the husband, or out of both, such alimony as the court shall think reasonable, not exceeding the use of one moiety of his real estate, during the life of the wife, and the property of one-half of his personal estate, having regard to the personal property which came to the husband by the marriage, and his ability.

SEC. 10. If there be issue living at the time of the divorce, the court, with regard to ordering restoration to the wife of such of her lands, tenements or hereditaments, if any, as may not be secured to her by law, and in regard to the amount of alimony to be allowed to her out of the property of the husband, may do as they shall judge the circumstances of the case may require.

SEC. 11. Divorces from bed, board, and future cohabitation, until the parties be reconciled, may be granted for any of the causes for which by law a divorce from the bond of marriage may be decreed, and for such other causes as may seem to require the same.

SEC. 12. In case of such divorce, the court may assign to the petitioner a separate maintenance out of the estate or property of the husband or wife, as the case may be, in such manner, and of such amount, as they may think necessary or proper.

SEC. 13. Every petition shall be signed by the petitioner, if of sound mind and of legal age to consent to marriage, otherwise upon application to the court, and after notice to the party in whose name the petition shall be filed, the court may allow such petition to be signed by a guardian or next friend.

SEC. 14. All jurisdiction over divorce, alimony, separate maintenance, or the custody, education, and support of the children of persons divorced or petitioning for a divorce, is vested in the supreme court.

SEC. 15. Said court shall have no cognizance of or jurisdiction over any petition for the same, or either of the same, unless the petitioner shall, at the time of preferring such petition, be a domiciled inhabitant of this state, and have resided therein for the period of one year, next before the preferring of such petition.

SEC. 16. All such petitions shall be filed, heard, and tried in the county in which the petitioner shall reside.

SEC. 17. The said court may, by general rule or otherwise, prescribe the notice to be given, within or without the state, on such petitions, and may issue such process as may be necessary to carry into effect all powers conferred upon them in relation to the same.

SECTIONS 18, 19 and 20 contain provisions in relation to citations to adverse party residing without the state, or in parts unknown.

SEC. 21. Whenever any citation, issued under the provisions of this chapter, shall be served by a disinterested person, such person shall return the same, having made oath thereon of the place where, the time when, and the manner in which he shall have made service of the said citations.

SECTION 22 provides for giving and ensuring proper and sufficient notice to the adverse party.

SEC. 23. The said court is empowered to regulate the custody, and provide for the education, maintenance and support of the children of all persons by them divorced or petitioning for a divorce, and of all persons to whom a separate maintenance may be granted, or who may petition for the same ; to make such allowance to the wife, out of the estate of her husband, for the purpose of enabling her to prosecute or defend against any such petition for divorce or separate maintenance, in case she has no property of her own available for such purpose, as they may think reasonable and proper ; and to make all necessary orders and decrees concerning the same, and the same at any time to alter, amend and annul for sufficient cause, after notice to the parties interested therein.

SEC. 24. The said court may authorize a married woman to whom a divorce from the bond of marriage is decreed to change her name, with the same rights and liabilities as if her name had not been changed.

SEC. 25. After the filing and during the pendency of any petition under this chapter, the supreme court may, as in equity, make such interlocutory decrees, or grant such temporary injunctions as may be necessary, until a hearing can be had before the court.

CHAPTER 198.

OF DIVORCES.

SECTION 5. The clerks of the supreme court in the several counties shall make returns to the secretary of the state board of health, on or before the first day of

March, in each and every year, for the year ending on the thirty-first day of December preceding, of all the applications for divorce, showing the number, the number granted, and the causes which are given for the application, but without the names of the parties, in accordance with the blanks which shall be furnished them by the secretary of the state board of health.

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